

Home Audio System

Operating Instructions

Getting Started

Disc/USB Playback

USB Transfer

Tuner

BLUETOOTH

Sound Adjustment

Other Operations

Additional Information

WARNING

To reduce the risk of fire, do not cover the ventilation opening of the appliance with newspapers, tablecloths, curtains, etc. Do not expose the appliance to naked flame sources (for example, lighted candles).

To reduce the risk of fire or electric shock, do not expose this appliance to dripping or splashing, and do not place objects filled with liquids, such as vases, on the appliance.

As the main plug is used to disconnect the unit from the mains, connect the unit to an easily accessible AC outlet. Should you notice an abnormality in the unit, disconnect the main plug from the AC outlet immediately.

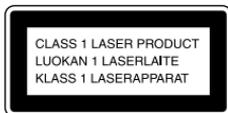
Do not install the appliance in a confined space, such as a bookcase or built-in cabinet.

Do not expose batteries or appliances with battery-installed to excessive heat, such as sunshine and fire.

The unit is not disconnected from the mains as long as it is connected to the AC outlet, even if the unit itself has been turned off.

CAUTION

The use of optical instruments with this product will increase eye hazard.



This product is classified as a Class 1 Laser product under IEC 60825-1:2007. This label is located on rear surface of the product.

Disposal of Old Electrical & Electronic Equipment (Applicable in the European Union and other European countries with separate collection systems)



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About this manual

- Icons, such as , listed at the top of each explanation indicate the type of media that can be used with the function being explained.
- The default setting is underlined.

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Playable discs and USB devices

| Type | Disc logo | Characteristics | Icon |
|------------|--|--|---|
| DVD VIDEO |       | <ul style="list-style-type: none"> DVD VIDEO DVD-R/DVD-RW in DVD VIDEO format or video mode DVD+R/DVD+RW in DVD VIDEO format |  |
| VIDEO CD |  | <ul style="list-style-type: none"> VIDEO CD (Ver. 1.1 and 2.0 discs) Super VCD CD-R/CD-RW/CD-ROM in VIDEO CD format or Super VCD format |  |
| CD |  | <ul style="list-style-type: none"> AUDIO CD CD-R/CD-RW in AUDIO CD format |  |
| DATA CD | — | <ul style="list-style-type: none"> CD-ROM/-R/-RW that contains the following files and conforms to ISO 9660¹⁾ Level 1/Level 2 or Joliet (extended format). <ul style="list-style-type: none"> MP3 files²⁾³⁾ JPEG image files⁴⁾ MPEG4 video files⁵⁾ Xvid video files⁶⁾ |  |
| DATA DVD | — | <ul style="list-style-type: none"> DVD-ROM/-R/-RW/+R/+RW that contains the following files and conforms to UDF (Universal Disk Format). <ul style="list-style-type: none"> MP3 files²⁾³⁾ JPEG image files⁴⁾ MPEG4 video files⁵⁾ Xvid video files⁶⁾ |  |
| USB device | — | <ul style="list-style-type: none"> USB devices that contain the following files. <ul style="list-style-type: none"> MP3²⁾³⁾ or WMA/AAC files³⁾ JPEG image files⁴⁾ MPEG4 video files⁵⁾ Xvid video files⁶⁾ |  |

- 1) A logical format of CD-ROMs, defined by ISO (International Organization for Standardization).
- 2) MP3 (MPEG 1 Audio Layer 3) is a standard format defined by ISO/MPEG for compressed audio data. MP3 files must be in MPEG 1 Audio Layer 3 format that have a file extension of ".mp3".
- 3) Files with copyright protection (Digital Rights Management) cannot be played back by the system.
- 4) JPEG image files must conform to the DCF image file format. (DCF "Design rule for Camera File System": Image standards for digital cameras regulated by Japan Electronics and Information Technology Industries Association (JEITA).)
- 5) MPEG4 video files must be recorded in MP4 file format with the extension ".mp4" or ".m4v".
Supported video codec and audio codec are as follows:
 - Video codec: MPEG4 Simple Profile (AVC is not supported.)
 - Audio codec: AAC-LC (HE-AAC is not supported.)
- 6) Xvid video files must be recorded in Xvid format with the extension ".avi".

Discs that cannot be played back

- BDs (Blu-ray Discs)
 - CD-ROM/-R/-RW other than those recorded in the formats listed on page 6
 - CD-ROMs recorded in PHOTO CD format
 - Data part of CD-Extra or Mixed Mode CDs*
 - CD Graphics disc
 - Super Audio CDs
 - DVD Audio
 - DVD-R/-RW in VR (Video Recording) mode
 - DATA CD/DATA DVD that does not contain MP3 files, JPEG image files, MPEG4 or Xvid video files
 - DATA CD/DATA DVD that is created in Packet Write format
 - DVD-RAM
 - A DVD VIDEO with a different region code
- CPRM (Content Protection for Recordable Media) compatible DVD-R/-RW recorded in Copy-Once programs
 - A disc that has a non-standard shape (e.g., heart, square, star)
 - A disc that has adhesive tape, paper, or a sticker attached to it
- * Mixed Mode CD: This format records PC data on the first track and audio (AUDIO CD data) on the second and subsequent tracks of a session.

Notes on CD-R/-RW and DVD-R/-RW/+R/+RW

- In some cases, a CD-R/-RW and DVD-R/-RW/+R/+RW cannot be played back on this system due to the recording quality or physical condition of the disc, or the characteristics of the recording device and authoring software. The disc will not play back if it has not been correctly finalized. For more information, refer to the operating instructions for the recording device.
- Some playback functions may not work with some DVD+Rs/+RWs, even if they have been correctly finalized. In this case, view the disc by normal playback.
- A disc created in Packet Write format cannot be played back.

Music discs encoded with copyright protection technologies

This product is designed to play back discs that conform to the Compact Disc (CD) standard. Recently, various music discs encoded with copyright protection technologies are marketed by some record companies. Please be aware that among those discs, there are some that do not conform to the CD standard and may not be playable by this product.

Note on DualDiscs

A DualDisc is a two sided disc product which mates DVD recorded material on one side with digital audio material on the other side. However, since the audio material side does not conform to the Compact Disc (CD) standard, playback on this product is not guaranteed.

Notes on playing multisession discs

- This system can play back multisession discs when an MP3 file, a JPEG image file, an Xvid video file, or an MPEG4 video file is contained in the first session. Any subsequent MP3 files, JPEG image files, Xvid video files or, MPEG4 video files recorded in later sessions can also be played back (If later sessions contain AUDIO CD format, the system cannot play back this multisession discs).
- If MP3 files and JPEG image files in AUDIO CD format or VIDEO CD format are recorded in the first session, only the first session will be played back.

Region code

Your system has a region code printed on the rear of the unit and will only play back a DVD labeled with the same region code. A DVD VIDEO labeled  will also play back on this system.

If you try to play back any other DVD VIDEO, the message [Playback prohibited by area limitations.] will appear on the TV screen. Depending on the DVD VIDEO, no region code indication may be given even though playing the DVD VIDEO is prohibited by area restrictions.

Note on DVD VIDEO and VIDEO CD playback operations

Some playback operations on a DVD VIDEO or VIDEO CD may be intentionally set by software producers. Since this system will play back a DVD VIDEO or VIDEO CD according to the disc contents the software producers designed, some playback features may not be available. Be sure to read the operating instructions of the DVD VIDEO or VIDEO CD.

Notes on playable files

- This system cannot play back a DATA CD/DVD or a USB device in the following cases:

| Condition | Disc | USB |
|--|------|-------|
| When the number of folders (albums) exceed | 300 | 300 |
| When the number of files (tracks) exceed | 999 | 2,000 |
| When the number of files and/or folders in a folder exceed | 650 | 650 |

These numbers may vary depending on the file or folder configuration.

- This system can play back the following files.

| File | Extension of the file |
|------------------|---------------------------|
| MP3 audio file | ".mp3" |
| WMA audio file* | ".wma" |
| AAC audio file* | ".m4a", ".mp4", or ".3gp" |
| JPEG image file | ".jpg" or ".jpeg" |
| MPEG4 video file | ".mp4" or ".m4v" |
| Xvid video file | ".avi" |

* USB device only

The system will attempt to play back any data with the extensions above, even if it is not in MP3/WMA/AAC/JPEG/MPEG4/Xvid format. Playing these data may generate a loud noise which could damage your speaker system.

- Playback may take a longer time to start when:
 - a DATA CD/DATA DVD/USB device has a complicated tree structure.
 - the audio files, image files, or video files in another folder have just been played back.
- Some files on DATA CDs/DATA DVDs/USB devices cannot be played back by the system depending on the file format.
- The system can play back to a depth of 8 folders only.
- The system may not be able to play back an audio file, image file, or video file depending on the file type.
- Folders that have no audio files, image files, or video files are skipped.
- The playback order of files for the system may differ from the original order of their creation.

- The playback order may not be applicable depending on the software used for creating the audio file, image file, or video file.
- Compatibility with all MP3/WMA/AAC encoding/writing software, recording devices, and recording media cannot be guaranteed.
- Compatibility with all MPEG4 or Xvid video encoding/writing software, recording devices, and recording media cannot be guaranteed.
- The system may not play back an Xvid video file when the file has been combined from two or more Xvid video files.
- Depending on the Xvid video file, the picture may be unclear or the sound may skip.
- The system cannot play back some MPEG4 or Xvid video files that are longer than 2 hours.

Websites for compatible devices and dedicated applications

Check the websites below for the latest information about compatible USB and BLUETOOTH devices as well as available applications.

For customers in Latin America:

<<http://esupport.sony.com/LA>>

**For customers in other countries/
regions:**

<<http://www.sony-asia.com/support>>

Notes on USB devices

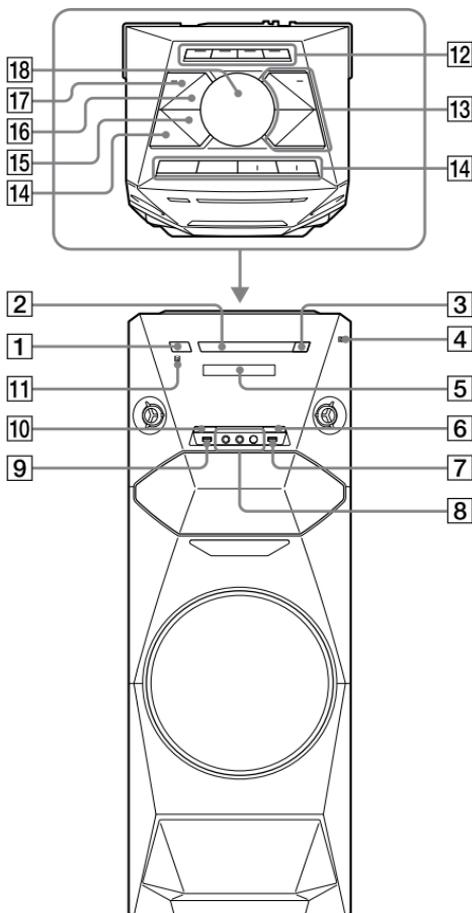
- This system is not guaranteed to operate with all USB devices or memories.
- Although there are a variety of complex functions for USB devices, the playable contents with this system are music, photo, and video contents only. For details on how to handle such content with the USB devices, refer to the operating instructions supplied with your device.
- When a USB device is connected, the system reads all the files on the USB device. If there are many folders or files on the USB device, it may take a long time to finish the reading process.
- Do not connect the system and the USB device through a USB hub.
- With some connected USB devices, there may be a delay before an operation is performed by this system.
- The playback order for the system may differ from the playback order of the connected USB device.

Guide to parts and controls

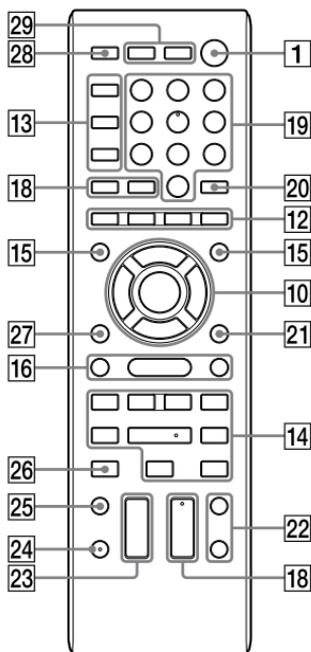
This manual mainly explains operations using the remote control, but the same operations can also be performed using the buttons on the unit having the same or similar names.

You can lock the buttons except I/⏻ (on/standby) on the unit to prevent them from being operated by mistake (page 55).

Unit



Remote control (RM-AMP113)



- 1** I/⏻ (on/standby)
Press to turn on the system, or set it to standby mode.
- 2** Disc tray
- 3** ▲ (open/close)
Press to open or close the disc tray.
- 4** **N** (N-Mark) (page 43)
Near Field Communication (NFC) touchpoint indication.
- 5** Display

- 6** REC TO USB B
Press to transfer music to the USB device connected to the ψ B port.
- 7** ψ B (REC/PLAY) (USB) port
Use to connect a USB device. This USB port can be used both for playback and music transfer.
- 8** MIC 1/2 jack
Use to connect the microphones.
MIC LEVEL (MIN/MAX)
Turn to adjust the microphone volume.
- 9** ψ A (PLAY) (USB) port
Use to connect a USB device. This USB port can be used only for playback.
- 10** $\uparrow/\downarrow/\leftarrow/\rightarrow$
Press to select the menu items.
Unit: ENTER
Remote control: ☺
Press to enter/confirm the settings.
- 11** Remote control sensor
- 12** FLANGER, ISOLATOR, PAN, WAH (page 48)
Press to select the DJ EFFECT type.

- 13** **MUSIC, MOVIE/GAME, FOOTBALL**
Press to select the preset sound effect (page 47).

Unit: PARTY CHAIN (page 52)

Hold down to activate or deactivate the Party Chain function.

Unit: BASS BAZUCA (page 47)

- Press to reinforce the bass sound ("BASS BAZUCA" effect).
- Hold down to reduce the bass sound ("BASS CUT" effect).

Unit: BASS BAZUCA indicator (page 47)

- 14** **▶¹ (play), || (pause)**
Press to start or pause playback. To resume playback, press ▶.

□ +/- (select folder)

Press to select a folder on a data disc or a USB device.

PRESET+/-

Press to select a preset station when using the tuner function.

Remote control: ◀◀/▶▶ (rewind/fast forward)

Hold down to find a point in a track or file during playback.

Remote control: ◀◀/▶▶ (slow back/slow forward)

Press to watch in slow-motion.

◀◀/▶▶ (go back/go forward)

Press to select a track or file.

TUNING+/-

Press to tune to the station you want when using the tuner function.

■ (stop)

- Press to stop playback. When pressed twice during USB playback, resume playback can be canceled.
- Press to stop transfer during music transfer.

15 **Remote control: DVD/TUNER MENU**

- Press to display the DVD menu items on the TV screen.
- Press to display image files in thumbnail view.
- Press to preset a radio station.

Remote control: LED PATTERN² (page 53)

Press to change the LED pattern for the speaker illumination.

Remote control: DVD TOP MENU

Press to display the DVD title on the TV screen.

LED COLOR² (page 53)

Press to change the LED color for the speaker illumination.

16 Remote control: DVD/CD

Press to select the DVD/CD function.

Remote control: USB

Press to select the USB function. Repeatedly pressing the button allows you to select between USB ports (ψ A or ψ B). Select the port to which the USB device is connected.

FUNCTION

Press to select a function.

17 BLUETOOTH (page 42)

- Press to select the BLUETOOTH function.
- Hold down to activate BLUETOOTH pairing in the BLUETOOTH function.

BLUETOOTH indicator (page 41)

18 Unit: VOLUME/DJ CONTROL

- Turn to adjust the volume.
- Turn to adjust the DJ EFFECT level (page 48).
You cannot use this knob to adjust the volume when the DJ EFFECT is activated.

**Remote control:
DJ CONTROL +/-**

Press to adjust the DJ EFFECT level.

Remote control: VOL +/-¹⁾

Press to adjust the volume.

19 Numeric buttons¹⁾

- Press to select a track, chapter or file with its item number.
- Press to enter numbers or values.

SLEEP²⁾ (page 53)

Press to set the Sleep Timer.

TIMER MENU²⁾ (page 19, 53)

Press to set the clock and the timers.

FM MODE²⁾

Press to select the FM reception mode (monaural or stereo) when using the tuner function (page 39).

AUDIO²⁾

Press to select the audio format.

SUBTITLE²⁾

Press to select a subtitle language when multilingual subtitles are available (e.g., DVD VIDEOS).

ANGLE²⁾

Press to switch to other viewing camera angles when multi-angles are recorded on a DVD VIDEO.

CLEAR²⁾

Press to delete the last step from the program list.

REPEAT²⁾

Press to select Repeat Play mode when using the DVD/CD or USB function (page 28).

PLAY MODE²⁾

Press to select the play mode for playback of a disc or a USB device (page 26).

20 MEDIA MODE

Press to select the media to be played back on a data disc or USB device.

21 OPTIONS²⁾

Press to enter or exit options menu.

SEARCH

- Press to display the folder list or file list on the TV screen.
- Press to search a specific title/ chapter/scene/track/index (DVD VIDEO and VIDEO CD only).

22 KEY CONTROL #/b (page 49)

Press to change the key to suit your vocal range.

23 ECHO +/-

Press to adjust the microphone echo level.

24 SHIFT¹⁾

Hold down to use with the pink-labeled buttons.

25 SCORE

Press to start or stop calculating your vocal score.

KARAOKE MODE²⁾ (page 49)

Press to select the Karaoke mode.

26 KARAOKE PON (page 49)

Press to turn the KARAOKE PON function on or off.

27 SETUP²⁾ (page 31)

Press to display the setup menu on the TV screen.

RETURN

Press to return to the previous menu.

28 DISPLAY²⁾

Press to view or hide the on-screen display.

DISPLAY

Press to change the information on the display.

29 TV INPUT³⁾

Press to switch the TV's input source.

TV I/³⁾

Press to turn the TV on or off.

¹⁾ The numeric button 5, VOL +, ► and SHIFT buttons on the remote control has a tactile dot. Use the tactile dot as a reference when operating the system.

²⁾ This button is printed in pink on the remote control. To use this button, hold down SHIFT (24), then press this button.

³⁾ This button is used to operate a Sony TV.

A ANTENNA

Find a location and an orientation that provide good reception when you set up the antennas. Keep the antennas away from the AC power cord and the USB cable to avoid picking up noise.

B VIDEO OUT jack

Use a video cord to connect to the video input jack of a TV or projector.

Note

Do not connect this unit to the TV through the video deck.

**C AUDIO OUT/
PARTY CHAIN OUT L/R jacks**

Use an audio cord (not supplied) to connect to the audio input jacks of an optional equipment (such as a VCR) or another audio system to create a Party Chain (page 50).

**D AUDIO IN/PARTY CHAIN IN
L/R jacks**

Use an audio cord (not supplied) to connect to the audio output jacks of an optional equipment (such as a TV or an audio/video equipment) or another audio system to create a Party Chain (page 50).

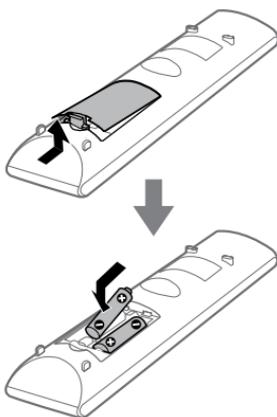
E Power

Connect the AC power cord (supplied) to the system, and then to the wall outlet.

When the AC power cord is connected, the demonstration (page 19) starts automatically. If you press I/⏻ to turn on the system, the demonstration ends.

Inserting batteries

Insert the two supplied R6 (size AA) batteries, matching the polarities shown below.

**Notes**

- Do not mix an old battery with a new one or mix different types of batteries.
- If you do not use the remote control for a long period of time, remove the batteries to avoid damage from battery leakage and corrosion.

Changing the color system

(Except for Latin American model)

Connect your TV to the system and set the color system to PAL or NTSC depending on the color system of your TV.

The default setting for color system is different depending on the area. Each time you perform the procedure below, the color system changes as follows:

NTSC ↔ PAL

- 1 Press I/⏻ to turn on the system.
- 2 Press DVD/CD.
- 3 Hold down PAN and LED COLOR on the unit for more than 3 seconds.

"COLOR NTSC" or "COLOR PAL" appears on the display.

Performing "QUICK" setup

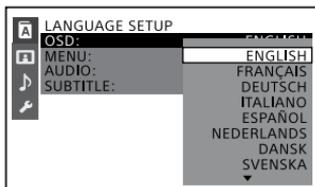
Before using the system, you can make the minimum basic adjustments in "QUICK" setup.

- 1 Turn on your TV and select the video input.
- 2 Press I/⏻ to turn on the system.
- 3 Press DVD/CD or USB.

The guide message [Press ENTER to run QUICK SETUP.] appears at the bottom of the TV screen.

- 4 Press ⊖ without loading a disc or connecting a USB device.

[LANGUAGE SETUP] appears on the TV screen. Displayed items may vary depending on country or region.



- 5 Press ▲/▼ repeatedly to select a language, then press ⊖.

The setting is selected and [VIDEO SETUP] appears on the TV screen.

- 6 Press ▲/▼ repeatedly to select the setting that matches your TV type, then press ⊖.

After [QUICK SETUP is complete.] appears on the TV screen, the system is ready for playback.

To change the setting manually

See "Using the Setup Menu" (page 31).

To quit "QUICK" setup

Hold down SHIFT, then press SETUP.

Note

The guide message appears when you turn on the system for the first time or after performing [RESET] (see "Returning the "SETUP" settings to the default" on page 63).

Setting the clock

1 Press I/⏻ to turn on the system.

2 Hold down SHIFT, then press **TIMER MENU**.

If "TIMER SEL" appears on the display, press ⬆/⬇ repeatedly to select "CLOCK SET," then press ⏻.

3 Press ⬆/⬇ repeatedly to set the hour, then press ⏻.

4 Press ⬆/⬇ repeatedly to set the minutes, then press ⏻.

Note

You cannot set the clock in Power Saving Mode.

Changing the display mode

Press DISPLAY repeatedly while the system is turned off.

Each time you press the button, the display mode changes as follows.

Demonstration

The display scrolls messages about the main features of this system using the built-in LEDs for illumination.

No display (Power Saving Mode)

The display is turned off to conserve power. The timer and clock continue to operate.

Clock

The clock display automatically turns to Power Saving Mode after a few seconds.

Disc/USB Playback

Basic playback

DVD-V VIDEO CD C D DATA CD DATA DVD USB

1 Select the function.

For DVD/CD function:

Press DVD/CD.

For USB function:

Press USB repeatedly until "USB A" or "USB B" lights up on the display.

2 Prepare the playback source.

For DVD/CD function:

Press \blacktriangle on the unit to open the disc tray and load a disc with the label facing up on the disc tray.



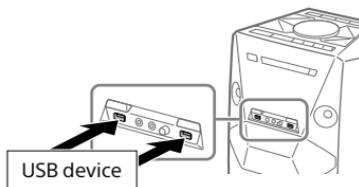
When you playback an 8 cm disc such as a CD single, place it on the inner circle of the tray.

Press \blacktriangle on the unit again to close the disc tray.

Do not forcibly push the disc tray to close it as this may cause a malfunction.

For USB function:

Connect a USB device to the ψ A or ψ B port according to your selection in step 1.



Note

You can use a USB adaptor (not supplied) to connect the USB device to the unit if the USB device cannot be plugged into the ψ port.

3 Press \blacktriangleright to start playback.

Other operations

| To | Do this |
|--|--|
| Stop playback | Press \blacksquare . |
| Pause playback | Press \parallel . |
| Resume playback or return to normal playback | Press \blacktriangleright . |
| Cancel the resume point | Press \blacksquare twice. |
| Select a track, file, chapter or scene | Press \blacktriangleleft or \blacktriangleright during playback. Or, press the numeric buttons, then press \odot . (Operation might be prohibited by disc or USB device) |

To select the playback source or transfer destination (USB Memory Select)

If the USB device has more than one memory (for example, internal memory and a memory card), you can select which memory to use as a playback source or transfer destination.

Note

You cannot select a memory during playback or transfer. Make sure to select a memory before starting playback or transfer.

- 1 Hold down SHIFT, then press OPTIONS.
- 2 Press $\blacktriangle/\blacktriangledown$ to select "MEM SEL," then press \odot .
- 3 Press $\blacktriangle/\blacktriangledown$ to select the memory you want, then press \odot .
To exit the options menu, hold down SHIFT, then press OPTIONS.

Playing a data disc/USB device

DATA CD DATA DVD USB

1 Select the function.

For DVD/CD function:

Press DVD/CD.

For USB function:

Press USB repeatedly until "USB A" or "USB B" lights up on the display.

2 Prepare the playback source.

For DVD/CD function:

Load a disc.

For USB function:

Connect a USB device to the ψ A or ψ B port according to your selection in step 1.

3 Press MEDIA MODE repeatedly to select the media type you want to play back.

- [MUSIC]: MP3, WMA*, AAC*
- [VIDEO]: Xvid and MPEG4
- [PHOTO]: JPEG

* USB device only.

4 Press \blacktriangleright to start playback.

To start playback from a specific file, see below.

Playing from a specific audio or video file

- 1 Press **SEARCH** to display the folder list.



- 2 Press **↑/↓** to select the folder you want.
- 3 Press **⊕** to display the file list.



- 4 Press **↑/↓** to select the file you want.
- 5 Press **⊕** to start playback from the selected file.

Playing from a specific image file (slide show)

- 1 Press **DVD/TUNER MENU**.
Thumbnail picture for the first 16 JPEG image files in the selected folder is displayed on the TV screen.



If there are more than 16 image files in the selected folder, the scroll bar appears at the right.

- 2 Press **↑/↓/←/→** to select the file you want.
- 3 Press **▶** to start playback from the selected file.

Other playback operations

DVD-V **VIDEO CD** **C D** **DATA CD** **DATA DVD** **USB**

Depending on the type of disc or file, the function may not work.

| To | Do this |
|-------------------------------|---|
| View DVD menu | Press DVD/TUNER MENU. |
| View folder list or file list | Press SEARCH. Press SEARCH again to turn off the folder list or file list. |

| To | Do this |
|--|--|
| Return to folder list when in track list or file list | Press RETURN. |
| Locate a point quickly in fast forward or fast reverse (Lock Search) | Press ◀◀ or ▶▶ during playback. Each time you press ◀◀ or ▶▶, the playback speed changes. |
| Watch frame by frame (Slow-motion Play) | Press ■■, then press ◀◀ or ▶▶. Each time you press ◀◀ or ▶▶, the playback speed changes. |
| View images in thumbnail view | Press DVD/TUNER MENU. |
| Navigate in thumbnail view | Press ▲/▼/◀/▶. |
| View single image | Press ⊙ in thumbnail view. |
| Start image slide show | Press ▶. You can change the interval of the slide show (page 33), and add effects to the slide show (page 33). |
| Stop image slide show | Press ■. |
| View next or previous image during slide show | Press ◀◀ or ▶▶. |
| Rotate the image by 90 degrees | Press ◀/▶ while viewing a picture. Hold down SHIFT, then press CLEAR to return to the original view. |

Searching a specific track



Press the numeric buttons to select the track you want to play back, then press ⊙.

To search using the SEARCH button

- 1 Press SEARCH to display the track list.
- 2 Press ▲/▼ to select the track you want to play back, then press ⊙.

Searching a specific title/ chapter/scene/track/index



- 1 Press SEARCH repeatedly during playback to select the search mode.
- 2 Press the numeric buttons to enter the title, chapter, scene, track, or index number you want, then press ⊙. Playback starts from the selected title, chapter, scene, track, or index.

Notes

- For VIDEO CD with PBC playback, press SEARCH to search the scene.
- For VIDEO CD without PBC playback, press SEARCH to search the track and index.

To search for a particular point using the time code

DVD-V

- 1 Press SEARCH repeatedly during playback to select the time search mode.
- 2 Press the numeric buttons to enter the time code, then press \oplus .

Example: To find a scene at 2 hours, 10 minutes, and 20 seconds after the beginning, press 2, 1, 0, 2, 0 ([2:10:20]).

If you make a mistake, hold down SHIFT, then press CLEAR to cancel the number.

To search using the DVD menu

DVD-V

- 1 Press DVD/TUNER MENU.
- 2 Press $\uparrow/\downarrow/\leftarrow/\rightarrow$ or the numeric buttons to select the title or item you want to play back, then press \oplus .

Changing the camera angles

DVD-V

Hold down SHIFT, then press ANGLE repeatedly during playback to select the camera angle you want.

Selecting the subtitle setting

DVD-V

Hold down SHIFT, then press SUBTITLE repeatedly during playback to select the subtitle language you want or turn off the subtitle.

Changing the language/sound

DVD-V

VIDEO CD

C D

DATA CD

DATA DVD

USB

Hold down SHIFT, then press AUDIO repeatedly during playback to select the audio format or mode you want.

DVD VIDEO

You can select audio format or language when the source contains multiple audio formats or multilingual audio.

When 4 digits are displayed, they indicate a language code. See "Language code list" (page 72) to confirm which language the code represents. When the same language is displayed two or more times, the DVD VIDEO is recorded in multiple audio formats.

VIDEO CD/CD/DATA CD/DATA DVD (MP3 file) or USB device (audio file)

You can change the sound output.

- [STEREO]: The standard stereo sound.
- [1/L]: The sound of the left channel (monaural).
- [2/R]: The sound of the right channel (monaural).

SUPER VIDEO CD

- [1:STEREO]: The stereo sound of audio track 1.
- [1:1/L]: The sound of the left channel of audio track 1 (monaural).
- [1:2/R]: The sound of the right channel of audio track 1 (monaural).
- [2:STEREO]: The stereo sound of audio track 2.
- [2:1/L]: The sound of the left channel of audio track 2 (monaural).
- [2:2/R]: The sound of the right channel of audio track 2 (monaural).

PBC playback

VIDEO CD

You can use the PBC (Playback Control) menu to enjoy the interactive features of VIDEO CD (VIDEO CD Version 2.0 and Super VCD).

1 Press **▶** to start playing a VIDEO CD with PBC functions.

The PBC menu appears on the TV screen.

2 Press the numeric buttons to select the item number you want, then press **⊕**.

3 Continue playback according to the instructions on the menu.

Note

PBC playback is canceled when Repeat Play is activated.

To cancel PBC playback

1 Press **⏮** or **⏭**, or press the numeric buttons to select a track when playback is stopped.

2 Press **▶** or **⊖**.
Playback starts from the selected track.

To return to PBC playback

Press **■** twice, then press **▶**.

Multi-disc resume play

DVD-V VIDEO CD

This system can store playback resume points for up to 6 discs and resumes playback when you insert the same disc again. If you store a playback resume point for the 7th disc, the resume point for the first disc will be deleted.

To activate this function, set [MULTI-DISC RESUME] in [SYSTEM SETUP] to [ON] (page 34).

Note

To play from the beginning of the disc, press **■** twice, then press **▶**.

Using play mode

Playing in sequential order (Normal Play)



When playback is stopped, hold down **SHIFT**, then press **PLAY MODE** repeatedly.

■ When playing a disc

- [DISC]: plays all the tracks/files in sequential order.
 - [FOLDER]*: plays all audio files in the specified folder on the disc.
- * Cannot be selected for AUDIO CD.

■ When playing a USB device

- [ALL USB DEVICES]: plays all audio files on both USB devices sequentially.
- [ONE USB DEVICE]: plays all audio files on one USB device sequentially.
- [FOLDER]: plays all audio files in the specified folder on the USB device.

Playing in random order (Shuffle Play)



When playback is stopped, hold down **SHIFT**, then press **PLAY MODE** repeatedly.

■ When playing a disc

- [DISC (SHUFFLE)]: shuffles all audio files on the disc.
 - [FOLDER (SHUFFLE)]*: shuffles all audio files in the specified folder on the disc.
- * Cannot be selected for AUDIO CD.

■ When playing a USB device

- [ALL USB DEVICES (SHUFFLE)]: shuffles all audio files on both USB devices.
- [ONE USB DEVICE (SHUFFLE)]: shuffles all audio files on one USB device.
- [FOLDER (SHUFFLE)]: shuffles all audio files in the specified folder on the USB device.

Notes

- Shuffle Play cannot be performed for image and video files.
- Shuffle Play is canceled when you
 - turn off the system.
 - open the disc tray.
 - perform USB A to USB B transfer (except REC1 transfer).
 - perform disc to USB device transfer (except REC1 transfer).
 - change MEDIA MODE.
 - switch the USB memory select.
- Shuffle Play may be canceled when you select a folder or a track to play back.

Creating your own program (Program Play)



You can make a program of up to 25 steps in the order you want them to be played back.

You can only program the audio tracks/files from the disc or USB A.

1 Select the function.

For DVD/CD function:

Press DVD/CD.

For USB function:

Press USB repeatedly until "USB A" lights up on the display.

- 2** (DATA CD DATA DVD USB only)
Press **MEDIA MODE** repeatedly to select [MUSIC].
- 3** When playback is stopped, hold down **SHIFT**, then press **PLAY MODE** repeatedly to select [PROGRAM].
- 4** Press **SEARCH**.
The folder list or track list appears on the TV screen.
- 5** (DATA CD DATA DVD USB only)
Press **▲/▼** repeatedly to select the folder you want, then press **○**.
File list appears on the TV screen.
- 6** Press **▲/▼** repeatedly to select the track or file you want, then press **○**.
The program step number appears on the left side of the selected track or file.
- 7** To program other tracks or audio files in the same folder, repeat step 6.
To program files on other folders, press **RETURN** to return to folder list and repeat steps 5 and 6.
- 8** Press **▶** to start Program Play.
Program list is displayed on the TV screen.
When the Program Play ends, you can restart the same program by pressing **▶**.

To delete a programmed step

- 1 Use the same procedure as in step 4 and step 5 of "Creating your own program (Program Play)".
- 2 Press **▲/▼** to select the track or file you want to delete, then press **○**.
The program step number on the left side of the selected track or file disappears.

To delete the last step from the program list

Hold down **SHIFT**, then press **CLEAR**.

To cancel Program Play

When playback is stopped, hold down **SHIFT**, then press **PLAY MODE** repeatedly to select other play modes.

To display the program list

Hold down **SHIFT**, then press **☰** DISPLAY repeatedly.

Notes

- Program Play cannot be performed for image and video files.
- Program Play is canceled when you
 - open the disc tray.
 - change MEDIA MODE.
 - switch the USB memory select.
- (DVD/CD function only) The program list is cleared when you open the disc tray.
- (USB function only) The program list is cleared when you:
 - perform the erase operation.
 - remove the USB device.
 - switch the USB memory select.
- (USB function only) Program Play is only available when the USB device is connected to the **ψ** A port.

Playing repeatedly (Repeat Play)

DVD-V VIDEO CD C D DATA CD DATA DVD USB

Hold down SHIFT, then press REPEAT repeatedly.

Depending on the type of disc or file, some settings may not be available.

- [OFF]: does not play back repeatedly.
- [ALL]: repeats all tracks or files in the selected play mode.
- [DISC]: repeats all contents (DVD VIDEO and VIDEO CD only).
- [TITLE]: repeats the current title (DVD VIDEO only).
- [CHAPTER]: repeats the current chapter (DVD VIDEO only).
- [TRACK]: repeats the current track.
- [FILE]: repeats the current video file.

To cancel Repeat Play

Hold down SHIFT, then press REPEAT repeatedly to select [OFF].

Notes

- "⏮" lights up on the display when Repeat Play is set to [ALL] or [DISC].
- "⏮" lights up on the display when Repeat Play is set to [TITLE], [CHAPTER], [TRACK] or [FILE].
- You cannot perform Repeat Play with VIDEO CD during PBC playback.
- Depending on the DVD VIDEO, you cannot perform Repeat Play.
- Repeat Play is canceled when you
 - open the disc tray.
 - turn off the system (DVD VIDEO and VIDEO CD only).
 - change the function (DVD VIDEO and VIDEO CD only).
 - perform USB A to USB B transfer (except REC1 transfer).
 - perform disc to USB device transfer (except REC1 transfer).
 - change MEDIA MODE.
 - switch the USB memory select.

Restricting playback of the disc

(Parental Control)

DVD-V

You can limit the playback of DVD VIDEOS according to a predetermined level. When a limited scene is played back, that scene may be skipped or replaced with different scenes.

1 When playback is stopped, hold down SHIFT, then press SETUP.

The setup menu appears on the TV screen.

2 Press \uparrow/\downarrow repeatedly to select [SYSTEM SETUP], then press \odot .

3 Press \uparrow/\downarrow repeatedly to select [PARENTAL CONTROL], then press \odot .

4 Enter or re-enter your 4-digit password using the numeric buttons, then press \odot .

5 Press \uparrow/\downarrow repeatedly to select [STANDARD], then press \odot .

6 Press \uparrow/\downarrow repeatedly to select a geographic area as the playback limitation level, then press \odot .

The area is selected.

When you select [OTHERS→], enter the area code for the geographic area you want according to the "Parental Control area code list" (page 73) by using the numeric buttons.

7 Press \uparrow/\downarrow repeatedly to select [LEVEL], then press \odot .

8 Press \uparrow/\downarrow repeatedly to select the level you want, then press \odot .

The lower the value, the stricter the limitation.

To turn off the "PARENTAL CONTROL" function

Set [LEVEL] to [OFF] in step 8.

To play back a disc for which "PARENTAL CONTROL" is set

1 Load the disc and press \blacktriangleright .

The display for entering your password appears on the TV screen.

2 Enter your 4-digit password using the numeric buttons, then press \odot .

The system starts playback.

If you forget your password

Remove the disc and repeat steps 1 to 3 of "Restricting playback of the disc" (page 28). When you are asked to enter your password, enter "199703" using the numeric buttons, then press \odot . The display will ask you to enter a new 4-digit password. After you enter a new 4-digit password, reload the disc and press \blacktriangleright .

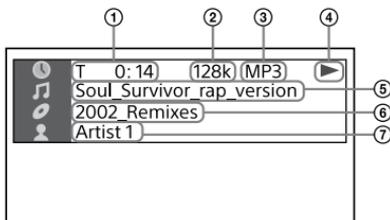
When the display for entering your password appears, enter your new password.

Viewing information of a disc and USB device

DVD-V VIDEO CD < D DATA CD DATA DVD USB

Information on the TV screen

Hold down SHIFT, then press \square DISPLAY repeatedly during playback.



- 1** [T **:**:*/C **:**:*/D **:**:*/] Playing time of the current title, track/chapter/disc
[T-**:**:*/C-**:**:*/D-**:**:*/] Remaining time of the current title, track/chapter/disc
[**:**:**] Playing time of the current scene/video file
[****/**/**]¹⁾ Date information of the current JPEG image file
- 2** **Bit rate**
Appears when playing an audio file.
- 3** **File type**
Appears when playing an audio/JPEG image/video file.
- 4** **Playback status**
- 5** **Title²⁾/track/file name³⁾**
Appears when playing an audio/JPEG image/video file.

⑥ **Album²⁾/folder name³⁾/
chapter/index number**
Appears when playing an audio/
JPEG image/video file.

⑦ **Artist name²⁾³⁾**
Appears when playing an audio
file.

1) Date information is displayed when the Exif (Exchangeable Image File Format) is recorded in the JPEG image file. Exif is a digital camera image format defined by the Japan Electronics and Information Technology Industries Association (JEITA).

2) If an audio file has an ID3 tag, the system will display an album name/ title name/artist name from the ID3 tag information. The system can support ID3 ver 1.0/1.1/2.2/2.3.

3) If the file or folder contains characters which cannot be displayed, those characters will be displayed as “_”.

Notes

- Depending on the source being played,
 - some information may not be displayed.
 - some characters cannot be displayed.
- Depending on the play mode, the information displayed may be different.

Displaying the audio format information in DVD VIDEOS and video files

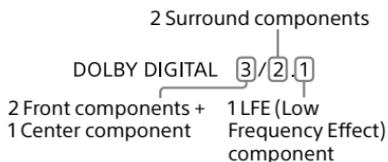
(DVD VIDEO and video files only)

Hold down SHIFT, then press AUDIO repeatedly during playback.

■ When playing a DVD VIDEO:

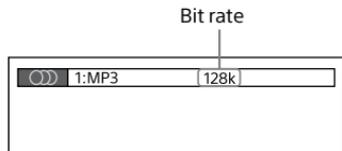
For example, in Dolby Digital format, multiple signals ranging from monaural to 5.1 channel signals can be recorded on a DVD VIDEO.

Example: For Dolby Digital 5.1 channel



■ When playing a video file:

Example: Information about MP3 format in an Xvid video file



Information on the display

Press DISPLAY repeatedly when the system is on.

You can view the information as follows:

- playing time, remaining time of track, title, chapter
- scene number
- file name, folder name
- title, artist and album information

Notes

- The disc name or track name may not be displayed depending on the characters.
- Playing time of audio files and video files may not be displayed correctly.

Using the Setup Menu

By using the setup menu, you can make various adjustments to items such as picture and sound. Displayed items vary depending on the country or region.

Note

Playback settings stored in the disc take priority over the setup menu settings. Therefore, some of the setup menu settings may not be performed.

- 1 When playback is stopped, hold down SHIFT, then press SETUP.**
- 2 Press $\blacktriangle/\blacktriangledown$ repeatedly to select the setup item from the displayed list:**
[LANGUAGE SETUP], [VIDEO SETUP], [AUDIO SETUP], or [SYSTEM SETUP], then press \odot .
- 3 Press $\blacktriangle/\blacktriangledown$ repeatedly to select the item you want, then press \odot .**
- 4 Press $\blacktriangle/\blacktriangledown$ repeatedly to select the setting you want, then press \odot .**
The setting is selected and setup is completed.



Setting the language – LANGUAGE SETUP

[OSD]

Sets the language of the on-screen display.

[MENU]**DVD-V**

Sets the language for the DVD menu.

[AUDIO]**DVD-V**

Switches the language of the sound track.

When you select [ORIGINAL], the language given priority in the disc is selected.

[SUBTITLE]**DVD-V**

Switches the language of the subtitle recorded in the DVD VIDEO. When you select [AUDIO FOLLOW], the language for the subtitles changes according to the language you selected for the sound track.

Note

If you select [OTHERS \rightarrow] in [MENU], [AUDIO], and [SUBTITLE], enter a language code from the "Language code list" (page 72) using the numeric buttons.



Setting the TV screen - VIDEO SETUP

[TV TYPE]

DVD-V

[16:9]: Select this when you connect a wide-screen TV or a TV with a wide mode function.



[4:3 LETTER BOX]: Select this when you connect a 4:3 screen TV. This setting displays a wide picture with bands on the upper and lower portions of the screen.



[4:3 PAN SCAN]: Select this when you connect a 4:3 screen TV. This setting displays the wide picture on the entire screen and cuts off the portions that do not fit.



[COLOR SYSTEM(VIDEO CD)]

(Except for Latin American model)

VIDEO CD

Sets the color system when you play back a VIDEO CD.

[AUTO]: Outputs the video signal according to the color system of the disc, either PAL or NTSC. Select this setting, if your TV uses a DUAL system.

[PAL]: Changes the video signal of an NTSC disc and output it in PAL system.

[NTSC]: Changes the video signal of a PAL disc and output it in NTSC system.

For details, see "Changing the color system" (page 18).

[BLACK LEVEL]

(Latin American model only)

Selects the black level (setup level) for the video signals output from the VIDEO OUT jack.

[ON]: Sets the black level of the output signal to the standard level.

[OFF]: Lowers the standard black level. Use this when the picture becomes too white.

[PAUSE MODE]

DVD-V

[AUTO]: The picture, including subjects that move dynamically, is output with no jitter. Normally select this position.

[FRAME]: The picture, including subjects that do not move dynamically, is output in high resolution.

[PHOTO EFFECT]**DATA CD DATA DVD USB**

(JPEG image files only)

Select an effect for the slide show.

[MODE 1]: The image sweeps in from top to bottom.**[MODE 2]:** The image sweeps in from left to right.**[MODE 3]:** The image stretches out from the center.**[MODE 4]:** The image randomly cycles through the effects.**[MODE 5]:** The next image slides over the current image.**[OFF]:** Turns off the effects.**[PHOTO INTERVAL]****DATA CD DATA DVD USB**

(JPEG image files only)

Select the slide show duration.

[NORMAL]: Sets the duration to the standard duration.**[FAST]:** Sets the duration shorter than [NORMAL].**[SLOW 1]:** Sets the duration longer than [NORMAL].**[SLOW 2]:** Sets the duration longer than [SLOW 1].**Setting the audio options
- AUDIO SETUP****[AUDIO DRC]****(Dynamic Range Compression)****DVD-V**

Useful for watching movies at low volume late at night.

[OFF]: No compression of dynamic range.**[STANDARD]:** Reproduces the sound track with the kind of dynamic range that the recording engineer intended.**[TRACK SELECTION]****DVD-V**

Gives priority to the sound track which contains the highest number of channels when you play back a DVD VIDEO on which multiple audio formats (PCM, MPEG audio, or Dolby Digital) are recorded.

[OFF]: No priority given.**[AUTO]:** Priority given.**[SCORE MODE]**

Select the scoring mode to rate your singing when in Karaoke mode.

[BEGINNER 1]: Beginner level. The score is displayed while singing.**[BEGINNER 2]:** Beginner level.**[EXPERT 1]:** Advance level. The score is displayed while singing.**[EXPERT 2]:** Advance level.**[DEMO]:** Demonstration mode.

The score is displayed regardless of singing.

[A/V SYNC]**DVD-V VIDEO CD DATA CD DATA DVD**

(Video files only)

Adjusts the delay between the picture and sound when the sound does not synchronize with the displayed picture.

[OFF]: Does not adjust.**[ON]:** Adjusts the difference between picture and sound.**[DOWNMIX]****DVD-V**

Select the audio output signal for playing a multi-channel audio.

[NORMAL]: Outputs multi-channel audio into a 2-channel stereo signal.**[DOLBY SURROUND]:** Outputs multi-channel audio into a 2-channel surround signal.



Setting the system – SYSTEM SETUP

[SCREEN SAVER]

The screen saver will help prevent your display device from becoming damaged (ghosting). Press any button to exit the screen saver.

[ON]: The screen saver image appears if you do not operate the system for about 15 minutes.

[OFF]: Turns off the function. The screen saver image does not appear.

[BACKGROUND]

Selects the background color or picture to be displayed on the TV screen.

[JACKET PICTURE]: The jacket picture (still picture) appears in the background, but only when the jacket picture is already recorded on the disc.

[GRAPHICS]: A preset picture stored in the system appears in the background.

[BLUE]: The background color is blue.

[BLACK]: The background color is black.

[PARENTAL CONTROL]

Sets the playback restrictions. For details, see "Restricting playback of the disc" (page 28).

[MULTI-DISC RESUME]

DVD-V VIDEO CD

[ON]: Stores the resume playback point in the memory for up to 6 discs.

[OFF]: Does not store the resume playback point in the memory. Playback starts at the resume playback point only for the current disc in the system.

[RESET]

Returns "SETUP" settings (except for "PARENTAL CONTROL" settings) to the default settings. For details, see "Returning the "SETUP" settings to the default" (page 63).

USB Transfer

Transferring music

You can transfer music from a sound source to a USB device connected to the USB port.

Audio formats used by the system for transfer vary depending on the source sound:

- When transferring CD-DA tracks on AUDIO CDs or from the radio, transferred files will be created in MP3 format.
- When transferring MP3 files on CD-R/CD-RW discs, transferred files will be created in MP3 format.
- When transferring audio files from a USB device (connected to the USB A port), files are created in the same format (MP3, WMA or AAC) as that of the source audio files.

Notes

- Do not remove the USB device during transfer or erase operations. Doing so may corrupt the data on the USB device or damage the USB device itself.
- MP3/WMA/AAC files are transferred with the same bit rate as the original files.
- USB transfer and erase operations are disabled while the disc tray is open.

Note on copyright-protected content

The transferred music is limited to private use only. Use of the music beyond this limit requires permission of the copyright holders.

To select the playback source or transfer destination (USB Memory Select)

See page 21.

To select the bit rate

You can select a higher bit rate to transfer music with better quality.

- 1 Hold down SHIFT, then press OPTIONS.
- 2 Press \uparrow/\downarrow repeatedly to select "BIT RATE," then press \odot .
- 3 Press \uparrow/\downarrow repeatedly to select the bit rate you want, then press \odot .
 - 128 KBPS: encoded MP3 files have smaller file size and lower audio quality.
 - 256 KBPS: encoded MP3 files have bigger file size but higher audio quality.

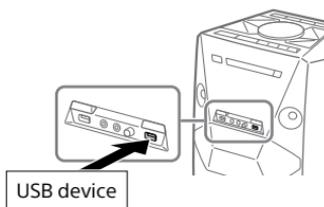
Note

The bit rate can be changed only when the sound source is CD-DA tracks on AUDIO CDs, radio sound, or optional equipment connected to the AUDIO IN L/R jacks.

Transferring music from a disc or USB device

You can easily transfer all the music on a disc or USB A to USB B (Synchronized Transfer). You can also transfer a single track or audio file during playback (REC1 Transfer).

1 Connect a USB device to the USB port.



Note

You can use a USB adaptor (not supplied) to connect the USB device to the unit if the USB device cannot be plugged into the USB port.

2 Select the function.

Discs:

Press DVD/CD, then load the disc. If the system starts playback automatically, press **■** twice to stop the playback fully.

USB:

Press USB repeatedly until "USB A" lights up on the display, then connect the USB device containing audio files you want to transfer to USB A port.

3 Prepare the sound source.

Synchronized Transfer:

When playback is stopped, hold down SHIFT, then press PLAY MODE repeatedly to select the play mode you want.

Note

If you start transferring in Shuffle Play, Repeat Play or Program Play with no steps, the selected play mode changes to Normal Play automatically.

REC1 Transfer:

Select the track or audio file you want to transfer, then start playback.

4 Press REC TO USB B on the unit.

"PUSH ENTER" appears on the display.

5 Press ENTER on the unit.

The transfer starts when "DO NOT REMOVE" appears on the display.

Do not remove the USB device until the transfer is complete.

When the transfer is complete, the system performs as follows:

Synchronized Transfer:

When the transfer is complete, the disc or USB device stops automatically.

REC1 Transfer:

The transfer is completed automatically, but the disc or USB device continues to play the next track or file.

To stop transfer

Press **■**.

Transferring analog audio (Analog Transfer)

You can transfer sound from an analog audio source (other than DVD/CD, USB or BLUETOOTH function) to a USB device. Use the buttons on the unit to perform this operation.

1 Connect a USB device to the Ψ B port (page 36).

2 Prepare for the source.

To transfer a radio program

See "Listening to the radio" (page 39) to tune to the desired station.

To transfer sound from a connected optional equipment

See "Using optional equipment" (page 54) to start playing the connected equipment.

3 Press **REC TO USB B**.

"PUSH ENTER" appears on the display.

4 Press **ENTER**.

The transfer starts when "DO NOT REMOVE" appears on the display.

To stop transfer

Press **■**.

To transfer sound as a new MP3 file during transfer

Press **REC TO USB B** during Analog Transfer. "NEW TRACK" appears on the display.

Notes

- While an MP3 file is being created, transfer is disabled.
- If you press **REC TO USB B** again after a few seconds, a new MP3 file can be created.
- If the transfer is not stopped, a new MP3 is created automatically approximately 1 hour after the transfer begins.

Erasing audio files or folders from a USB device

1 Press **USB** repeatedly until "USB A" or "USB B" lights up on the display.

2 When playback is stopped, hold down **SHIFT**, then press **OPTIONS**.

3 Press \uparrow/\downarrow to select "ERASE," then press \odot .

The folder list is displayed on the TV screen.

4 Press \uparrow/\downarrow to select a folder, then press \odot .

5 Press \uparrow/\downarrow to select an audio file you want to erase, then press \odot .

If you want to delete all the audio files and the folder containing those files, select [ALL TRACKS] on the list. "FLDR ERASE" or "TRK ERASE" and "PUSH ENTER" appear on the display.

To cancel erase operations, press **■**.

6 Press \odot .

"COMPLETE" appears on the display.

Notes

- You cannot erase audio files or folders when Shuffle Play or Program Play mode has been selected. Set the play mode to Normal Play before erasing.
- A folder that contains non-MP3/WMA/AAC format audio files or sub folders cannot be erased.

Folder and file generation rules

Maximum number of audio files that can be generated

- 298 folders
- 650 files in a folder
- 650 files in REC1-CD or REC1-MP3 folder.

These numbers may vary depending on the file or folder configuration.

When transferring to a USB device, a "MUSIC" folder is created directly below "ROOT." Folders and files are generated within this "MUSIC" folder according to the transfer method and source as follows:

Synchronized Transfer¹⁾

■ When transferring CD-DA tracks from an AUDIO CD

Folder name: "CDDA0001"²⁾
File name: "TRACK001"²⁾

■ When transferring MP3 files from a disc or MP3/WMA/AAC files from a USB device

Folder name: Same as the source
File name: Same as the source

REC1 Transfer

■ When transferring a CD-DA track from an AUDIO CD

Folder name: "REC1-CD"
File name: "TRACK001"²⁾

■ When transferring an MP3 file from a disc or MP3/WMA/AAC file from a USB device

Folder name: "REC1-MP3"
File name: Same as the source

Analog Transfer³⁾

■ When transferring an FM program

Folder name: "TUFM0001"²⁾
File name: "TRACK001"²⁾

■ When transferring an AM program

Folder name: "TUAM0001"²⁾
File name: "TRACK001"²⁾

■ When transferring sound from the connected optional equipment

Folder name: "EXAU0001"²⁾
File name: "TRACK001"²⁾

¹⁾ In Program Play mode, the folder name is "PGM_xxxx," and the file name depends on the music source (AUDIO CD or audio files).

²⁾ Folder and file numbers are assigned serially thereafter.

³⁾ When performing transfer separation (see "To transfer sound as a new MP3 file during transfer" on page 37), newly created MP3 files are saved in the same folder that is created during the first transfer.

Notes on transferring

- While transferring (except analog transfer), no sound is output.
- CD-TEXT information is not transferred to the created MP3 files.
- The transfer stops automatically if:
 - the USB device runs out of space during transfer.
 - the number of audio files or folders on the USB device reaches the limit that the system can recognize.
- If a folder or file that you are trying to transfer already exists on the USB device with the same name, a sequential number is added after the name without overwriting the original folder or file.
- You cannot perform the following operations during transfer:
 - Eject the disc.
 - Select another track or file.
 - Pause playback or find a point in the track or file.
 - Change the function or tuner band.
- When transferring music to a Walkman® using “Media Manager for WALKMAN,” be sure to transfer in MP3 format.
- When connecting a Walkman® to the system, be sure to connect after the display “Creating Library” or “Creating Database” on the Walkman® has disappeared.

Tuner

Listening to the radio

1 Press FUNCTION repeatedly to select the tuner function (“TUNER FM” or “TUNER AM”).

2 For automatic scanning:

Hold down TUNING+/- until the frequency begins to change on the display.

Scanning stops automatically and “TUNED” lights up on the display when a station is found.

If “TUNED” does not light up and scanning does not stop, press ■ to stop scanning. Then, perform manual tuning (below).

For manual tuning:

Press TUNING+/- repeatedly to tune to the station you want.

Note

When you tune to an FM station that provides RDS services, information such as the service name or station name is provided by broadcasts. You can check the RDS information by pressing DISPLAY repeatedly.

Hint

To reduce static noise on a weak FM stereo station, hold down SHIFT, then press FM MODE repeatedly until “MONO” lights up on the display. You will lose the stereo effect, but reception will improve.

To change the AM tuning interval

The default setting for AM tuning interval is 9 kHz (or 10 kHz for some areas).

Use the buttons on the unit to perform this operation.

Note that you cannot change the AM tuning interval in Power Saving Mode.

- 1 Press **FUNCTION** repeatedly to select "TUNER AM."
- 2 Press **I/⏻** to turn off the system.
- 3 While holding down **▶▶I**, press **I/⏻**.
"9K STEP" or "10K STEP" appears on the display.
When you change the interval, all the AM preset stations are erased.

Presetting radio stations

You can store up to 20 FM and 10 AM stations as your favorite stations.

- 1 Tune to the station you want.
- 2 Press **DVD/TUNER MENU**.



- 3 Press **▲/▼** repeatedly to select the preset number you want, then press **⊕**.
"COMPLETE" appears on the display and the station is stored.
If another station is already assigned to the selected preset number, that station is replaced by the new one.

To listen to the preset station

Press **PRESET+/-** (or **□ +/-** on the unit) repeatedly to select the preset number you want.

You can also press the numeric buttons, then press **⊕** to select a preset station.

BLUETOOTH

About the BLUETOOTH wireless technology

BLUETOOTH wireless technology is a short-range wireless technology that enables wireless data communication between digital devices. BLUETOOTH wireless technology operates within a range of about 10 meters.

Supported BLUETOOTH version, profiles and codecs

Supported BLUETOOTH version:

- BLUETOOTH Standard version 3.1

Supported BLUETOOTH profiles:

- A2DP (Advanced Audio Distribution Profile)
- AVRCP 1.3 (Audio Video Remote Control Profile)
- SPP (Serial Port Profile)

Supported BLUETOOTH codecs:

- SBC (Sub Band Codec)
- AAC (Advanced Audio Coding)

Listening to music wirelessly on a BLUETOOTH device

You can listen to music from your BLUETOOTH device over a wireless connection.

Check the websites for the information about compatible BLUETOOTH devices (page 10).

About the BLUETOOTH indicator

The BLUETOOTH indicator lights up or flashes in blue to show the BLUETOOTH status.

| System status | Indicator status |
|-------------------------------------|------------------|
| BLUETOOTH standby | Flashes slowly |
| BLUETOOTH pairing | Flashes quickly |
| BLUETOOTH connecting | Flashes |
| BLUETOOTH connection is established | Lights up |

Pairing this system with a BLUETOOTH device

Pairing is an operation where BLUETOOTH devices register with each other beforehand. Once a pairing operation is performed, it does not need to be performed again. If your device is an NFC-compatible smartphone, the manual pairing procedure is not necessary.

1 Place the BLUETOOTH device within 1 meter from the system.

2 Press BLUETOOTH on the unit to select the BLUETOOTH function.
“BLUETOOTH” appears on the display.

Note

If the system is connected to a BLUETOOTH device, press BLUETOOTH to disconnect the BLUETOOTH device.

3 Hold down BLUETOOTH on the unit for 2 seconds or more.
“PAIRING” flashes on the display.

4 Perform the pairing procedure on the BLUETOOTH device.

For details, refer to the operating instructions of your BLUETOOTH device.

5 Select the model number of the unit on the display of the BLUETOOTH device.

For example, select “SONY:MHC-V6D.”

If passkey is required on the BLUETOOTH device, enter “0000”.

6 Perform the BLUETOOTH connection on the BLUETOOTH device.

When pairing is completed and the BLUETOOTH connection is established, BLUETOOTH device name appears on the display.

Depending on the BLUETOOTH device, connection may start automatically after pairing is completed.

You can check the BLUETOOTH device address by pressing DISPLAY repeatedly.

Notes

- You can pair up to 9 BLUETOOTH devices. If the 10th BLUETOOTH device is paired, the oldest paired device will be deleted.
- “Passkey” may be called “Passcode,” “PIN code,” “PIN number” or “Password,” etc., depending on the device.
- The pairing standby status of the system is canceled after about 5 minutes. If pairing is not successful, repeat from step 1.
- If you want to pair with another BLUETOOTH device, repeat steps 1 to 6.

To cancel the pairing operation

Hold down BLUETOOTH on the unit for 2 seconds or more until “BLUETOOTH” appears on the display.

Connecting a smartphone with one touch (NFC)

When you touch the system with an NFC-compatible smartphone, the system automatically:

- turns on in the BLUETOOTH function.
- completes pairing.
- completes the BLUETOOTH connection.

What is “NFC”?

NFC (Near Field Communication) is a technology enabling short-range wireless communication between various devices, such as mobile phones and IC tags. Thanks to the NFC function, data communication can be achieved easily just by touching the designated touchpoint on the NFC-compatible devices.

1 Download and install the “NFC Easy Connect” app.

Download the free Android™ app from Google Play™ by searching for “NFC Easy Connect” or access it by using the two-dimensional code below. Data communication fees may be charged.

Two-dimensional code* for direct access

* Use a two-dimensional code reader app.



Notes

- The App may not be available in some countries and/or regions.
- Depending on your smartphone, you can use the NFC function without installing the app. In this case, the operations and specifications may differ. For details, refer to the operating instructions of your smartphone.

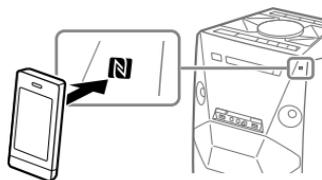
Compatible smartphones

Smartphones with a built-in NFC function (OS: Android 2.3.3 or later, excluding Android 3.x)

2 Start the “NFC Easy Connect” app on the smartphone.

Make sure that the application screen is displayed.

3 Touch the smartphone to the N-Mark on the system until the smartphone vibrates.



Complete the connection by following the instructions displayed on the smartphone.

When the BLUETOOTH connection is established, the BLUETOOTH indicator stops flashing and remains light up. BLUETOOTH device name appears on the display.

You can switch the sound source from the smartphone to another NFC-compatible BLUETOOTH device.

For details, refer to the operating instructions of your BLUETOOTH device.

Hint

If pairing and the BLUETOOTH connection fail, do the following.

- Relaunch “NFC Easy Connect” and move the smartphone slowly over the N-Mark.
- Remove the case from the smartphone if using a commercially available smartphone case.

Listening to music on a BLUETOOTH device

You can operate a BLUETOOTH device by connecting the system and the BLUETOOTH device using AVRCP.

Check the following before playing music:

- The BLUETOOTH function of the BLUETOOTH device is turned on.
- Pairing has been completed.

To play music on a NFC-incompatible BLUETOOTH device

1 Press BLUETOOTH on the unit to select the BLUETOOTH function.

“BLUETOOTH” appears on the display.

2 Establish connection with the BLUETOOTH device.

The last connected BLUETOOTH device will be connected automatically.

Perform the BLUETOOTH connection from the BLUETOOTH device if the device is not connected.

Once the connection is established, the BLUETOOTH device name appears on the display.

3 Press ►.

Depending on the BLUETOOTH device,

- you may need to press ► twice.
- you may need to start playback of an audio source on the BLUETOOTH device.

Notes

- When the system is not connected to any BLUETOOTH device, the system will connect and playback from the last connected BLUETOOTH device automatically when you press ►.
- If you try to connect another BLUETOOTH device to the system, the current connected BLUETOOTH device will be disconnected.

To play music on a NFC-compatible smartphone

Touch the smartphone to the N-Mark on the system to establish the BLUETOOTH connection. Start playback of an audio source on the smartphone. For details on playback, refer to the operating instructions of your smartphone.

To terminate the BLUETOOTH connection

■ For NFC-incompatible BLUETOOTH devices

Press BLUETOOTH on the unit. “BLUETOOTH” appears on the display.

Depending on the BLUETOOTH device, the BLUETOOTH connection may be terminated automatically when you stop playback.

■ For NFC-compatible smartphones

Touch the smartphone to the N-Mark on the system again.

Erasing all the pairing registration information

Use the buttons on the unit to perform this operation.

1 Press **BLUETOOTH** to select the **BLUETOOTH** function.

"BLUETOOTH" appears on the display.

If the system is connected to a BLUETOOTH device, the BLUETOOTH device name appears on the display. Press BLUETOOTH to terminate the BLUETOOTH connection.

2 Hold down **■** and **FLANGER** for about 3 seconds.

"BT HISTORY" and "CLEAR" appear on the display and all the pairing information is erased.

Setting the BLUETOOTH audio codecs

You can select the BLUETOOTH audio codecs when the connected BLUETOOTH device supports Advanced Audio Coding (AAC).

1 Hold down **SHIFT**, then press **OPTIONS**.

2 Press **▲/▼** repeatedly to select "**BT AAC**," then press **⊕**.

3 Press **▲/▼** repeatedly to select "**ON**" or "**OFF**," then press **⊕**.

- **ON:** Select this setting if the BLUETOOTH device supports Advanced Audio Coding (AAC).
- **OFF:** Select this setting if the BLUETOOTH device only supports Sub Band Codec (SBC).

Notes

- You can enjoy high quality sound if the AAC is selected. In case you cannot listen to AAC sound from your device, select "OFF."
- If you change this setting while the system is connected to a BLUETOOTH device, the BLUETOOTH device will be disconnected. To connect to the BLUETOOTH device, perform the BLUETOOTH connection again.

Setting the BLUETOOTH standby mode

The BLUETOOTH standby mode enables the system to turn on automatically when you establish the BLUETOOTH connection with a BLUETOOTH device.

- 1 Hold down SHIFT, then press OPTIONS.**
- 2 Press \uparrow/\downarrow repeatedly to select "BT STBY," then press \ominus .**
- 3 Press \uparrow/\downarrow repeatedly to select "ON" or "OFF," then press \ominus .**
- 4 Press I/ \odot to turn off the system.**

When the BLUETOOTH standby mode is set to on, the system waits for a BLUETOOTH connection even when the system has been turned off. When a BLUETOOTH connection is established, the system turns on automatically.

Using "SongPal" via BLUETOOTH

About App

A dedicated app for this model is available on both Google Play and App Store. Search for "SongPal" and download the free app to find out more about the convenient features.

BLUETOOTH technology works with iPhone 5s, iPhone 5c, iPhone 5, iPhone 4s, iPhone 4, iPhone 3GS, iPod touch (5th generation), iPod touch (4th generation).

Sound Adjustment

Adjusting the sound

| To | Do this |
|---|---|
| Reinforce the bass and create a more powerful sound | Press BASS BAZUCA on the unit. The BASS BAZUCA indicator lights up. |
| Reduce the bass sound (BASS CUT) | Hold down BASS BAZUCA on the unit for 2 seconds or more. To cancel the BASS CUT effect, press BASS BAZUCA again. |
| Select a preset sound effect | Press MUSIC, MOVIE/GAME or FOOTBALL. To cancel preset sound effect, press MUSIC repeatedly to select "FLAT." |

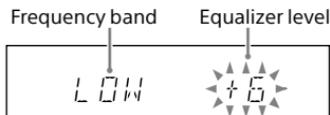
Notes

- When BASS CUT effect is turned on, the BASS BAZUCA indicator flashes and "BASS CUT" appears on the display every 10 seconds.
- The BASS CUT effect is turned off automatically when you turn off the system.

Creating your own sound effect

You can raise or lower the levels of specific frequency bands, then store the setting in the memory as "CUSTOM EQ."

- 1 Hold down SHIFT, then press OPTIONS.**
- 2 Press \uparrow/\downarrow repeatedly to select "EQ EDIT," then press \odot .**
- 3 Press \uparrow/\downarrow repeatedly to adjust the equalizer level, then press \odot .**



- 4 Repeat step 3 to adjust the level of other frequency bands and surround effect.**

The user equalizer setting is stored when "CUSTOM EQ" appears on the display.

To select the user equalizer setting

Press MUSIC repeatedly to select "CUSTOM EQ."

Creating a party atmosphere (DJ EFFECT)

1 Press the following button to select the effect type.

The selected button lights up and the effect is activated.

- **FLANGER:** Create a deep flanging effect that is similar to the roar of a jet plane.
- **ISOLATOR:** Isolate a specific frequency band by adjusting the other frequency bands. This is useful when you want to focus on the vocals.
- **PAN:** Create a feeling that the sound is moving around the speakers between left and right channels.
- **WAH:** Create a special effect of "Wah-wah" sound by moving the frequency of a filter up and down automatically.

2 Press DJ CONTROL +/- to adjust the effect level.

To turn off the effect

Press the selected effect button again.

Notes

- The DJ EFFECT is automatically turned off when you turn off the system or change the function or tuner band.
- The DJ EFFECT does not affect the transferred audio files. Transferred audio files will be generated without the DJ EFFECT even if you have activated it.
- You cannot use VOLUME/DJ CONTROL on the unit to adjust the volume when the DJ EFFECT is activated. Press VOL +/- on the remote control to adjust the volume.

Singing along: Karaoke

DVD-V VIDEO CD CD DATA CD DATA DVD USB

Preparing for karaoke

- 1 Press DVD/CD or USB.
- 2 Turn MIC LEVEL on the unit to MIN to reduce the microphone volume level.
- 3 Connect an optional microphone to MIC 1 or MIC 2 jack on the unit.
Connect another optional microphone if you want to sing in duet.
- 4 Start playing the music and adjust the volume. Press ECHO +/- to adjust the echo effect.
- 5 Start singing along with the music.

To turn off the Karaoke mode

Disconnect all the microphones or hold down SHIFT, then press KARAOKE MODE.

Notes

- Karaoke mode is automatically turned off when you
 - turn off the system.
 - change the function.
 - disconnect all the microphones.
- If howling occurs:
 - move the microphone away from the system.
 - change the direction of the microphone.
 - lower the microphone volume level.
 - press VOL – or ECHO – repeatedly.
- The sound from the microphone will not be transferred onto the USB device during USB transferring.

Changing the key (Key Control)

Press **KEY CONTROL #/b** to suit your vocal range in Karaoke mode.

Playing karaoke with any stereo track, audio file, or video file (Karaoke Pon)

You can enjoy karaoke with a stereo-recorded track, audio file, or video file, even if it is a non-karaoke disc or media, by suppressing the sound of the vocals.

Press **KARAOKE PON** in Karaoke mode.

“K.PON ON” appears on the display.

To cancel Karaoke Pon Mode

Press **KARAOKE PON** again.

Selecting the scoring mode (Score Mode)

When Karaoke mode is turned on, you can use the scoring function. Your score is calculated from a scale of 0 to 99 by comparing your voice with the music source.

- 1 Start playing the music.**
- 2 Press SCORE before singing a song in Karaoke mode.**
- 3 After singing for more than a minute, press SCORE again to view your score.**

To select the rating of the Score Mode

See “[SCORE MODE]” in “Setting the audio options – AUDIO SETUP” (page 33).

Other Operations

Using the Party Chain function

You can connect multiple audio systems in a chain to create a more interesting party environment and to produce higher sound output. A system in the chain will activate the Party Chain function as "Party Host" and share the music. Other systems will become "Party Guests" and play the same music as that being played by the "Party Host."

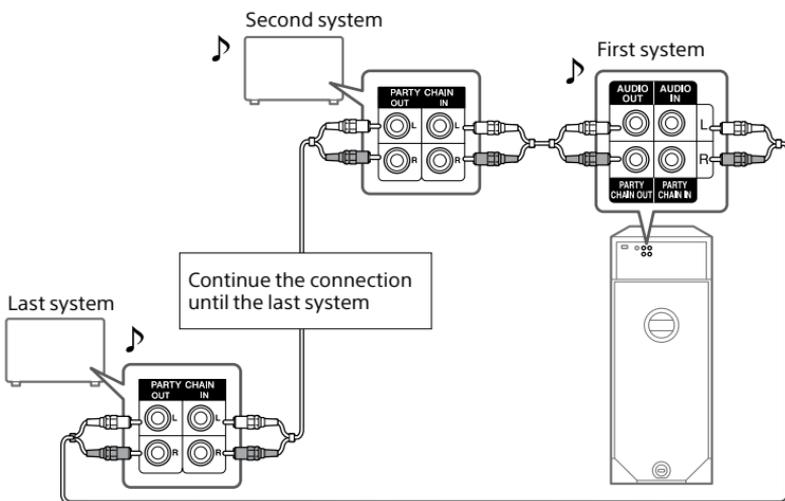
Setting up the Party Chain

You can set up a Party Chain by connecting all the systems using audio cords (not supplied).

Before connecting cords, be sure to disconnect the AC power cord.

A If all the systems are equipped with Party Chain function

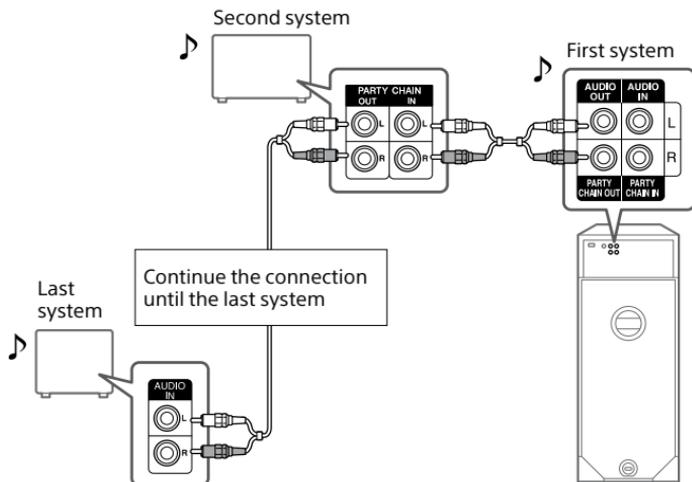
Example: When connecting using this system as the first system



- Any system can become a Party Host in this connection.
- You can change the Party Host to a new Party Host after the Party Chain function is activated on another Party Host. For details, see "To select a new Party Host" (page 52).
- In this connection, the last system must be connected to the first system.

B If one of the systems is not equipped with Party Chain function

Example: When connecting using this system as the first system



- You can connect the system which is not equipped with Party Chain function at the last system. Be sure to select the audio in function on this last system.
- You must select the first system as Party Host so that all systems are playing the same music when Party Chain function is activated.
- In this connection, the first system and the last system are not connected.

Enjoying the Party Chain

Perform the following procedure to activate the Party Chain function.

- 1 Plug in the AC power cord and turn on all the systems.**
- 2 Adjust the volume on each system.**
- 3 Activate the Party Chain function on the system to be used as the Party Host.**

Press FUNCTION on the Party Host repeatedly to select the function you want (except the audio in function), then start playback.

Hold down MUSIC/PARTY CHAIN on the Party Host for 2 seconds. "PARTY CHAIN" appears on the display for 2 seconds. The Party Host starts the Party Chain, and other systems become Party Guests automatically. All systems play the same music as that being played by the Party Host.

Notes

- Depending on the total unit of systems you have connected, Party Guests may take some time to start playing the music.
- For detailed operation on other systems, refer to the operating instructions of the systems.

To select a new Party Host

Repeat step 3 of "Enjoying the Party Chain" on the system to be used as a new Party Host. The current Party Host becomes Party Guest automatically. All systems play the same music as that being played by the new Party Host.

To deactivate the Party Chain

Hold down MUSIC/PARTY CHAIN on the Party Host for 2 seconds.

Notes

- Changing the volume level and sound effect on the Party Host will not affect the output on the Party Guests.
- The Party Guests continue playing the music source from the Party Host even if you change the function on any of the Party Guests. However, you can adjust the volume and change the sound effect on any of the Party Guests.
- When you use the microphone on Party Host, the sound will not be output from Party Guests.
- The system which is not equipped with Party Chain function cannot become a Party Host.

Setting the Party Chain sound mode

You can set the sound mode when the Party Chain function is activated.

- 1 Hold down SHIFT, then press OPTIONS.**
 - 2 Press \uparrow/\downarrow repeatedly to select "P.CHAIN MODE," then press \odot .**
 - 3 Press \uparrow/\downarrow repeatedly to select "STEREO," "RIGHT CH" or "LEFT CH," then press \odot .**
 - STEREO: outputs the stereo sound.
 - RIGHT CH: outputs the monaural sound of the right channel.
 - LEFT CH: outputs the monaural sound of the left channel.
- To exit the options menu, hold down SHIFT, then press OPTIONS.

Changing the illumination pattern and color

- 1 Hold down **SHIFT**, then press **LED PATTERN** or **LED COLOR** to show the current setting.
- 2 Hold down **SHIFT**, then press **LED PATTERN** or **LED COLOR** repeatedly to select the **illumination pattern or color**.
To turn off the illumination, hold down **SHIFT**, then press **LED PATTERN** repeatedly to select "LED OFF."

Note

If the illumination (LED) brightness is glaring, switch on the room lights or turn off the LED.

Using the timers

The system offers three timer functions. You cannot activate both the Play Timer and the Recording Timer at the same time. If you use either with the Sleep Timer, the Sleep Timer has priority.

Sleep Timer

You can fall asleep while listening to music. The system turns off after the preset time.

Hold down SHIFT, then press SLEEP repeatedly to select the desired time.

To cancel Sleep Timer, hold down **SHIFT**, then press **SLEEP** repeatedly to select "OFF."

Hint

To check the remaining time before the system turns off, hold down **SHIFT**, then press **SLEEP**.

Play Timer/Recording Timer

Make sure you have set the clock.

Play Timer:

You can wake up to disc, tuner or USB device at a preset time.

Recording Timer:

You can transfer music from a preset radio station to a USB device at a specified time.

1 Prepare the sound source.

For Play Timer:

Prepare the sound source, then press **VOL +/-** to adjust the volume. When selecting a disc or USB device as a sound source, and you want to start from a specific track or file, create your own program (page 26).

For Recording Timer:

Tune to the radio station (page 39).

2 Hold down SHIFT, then press TIMER MENU.

3 Press **▲/▼** repeatedly to select "PLAY SET" or "REC SET," then press **⊕**.

4 Set the time to start playback or transfer.

Press **▲/▼** repeatedly to set the hour/minute, then press **⊕**.

5 Use the same procedure as in step 4 to set the time to stop playback or transfer.

- 6** Press \uparrow/\downarrow repeatedly to select the sound source you want, then press \ominus .

For Recording Timer, connect a USB device to the Ψ B port after selecting the sound source.

- 7** Press I/power to turn off the system.

Note

If the system remains on, the timers will not take effect.

To check the timer setting or activate the timer again

- 1 Hold down SHIFT, then press TIMER MENU.
"TIMER SEL" flashes on the display.
- 2 Press \ominus .
- 3 Press \uparrow/\downarrow repeatedly to select "PLAY SEL" or "REC SEL," then press \ominus .

To cancel the timer

Repeat the same procedure as "To check the timer setting or activate the timer again" and select "TIMER OFF" in step 3, then press \ominus .

Notes

- The system turns on before the preset time. If the system is already turned on at the preset time or if "STANDBY" flashes on the display, the Play Timer and the Recording Timer will not be activated.
- Do not operate the system from the time the system turns on until the playback or transfer starts.

Using optional equipment

- 1 Press VOL – repeatedly until "VOLUME MIN" appears on the display.
- 2 Connect an optional equipment to AUDIO IN L/R jacks.
- 3 Press FUNCTION repeatedly to select the audio in function which corresponds to the connected equipment.
- 4 Start playing the connected equipment.
- 5 Press VOL + repeatedly to adjust the volume.

Note

The system may enter standby mode automatically if the volume level of the connected equipment is too low. Adjust the volume level of the equipment. If you turn off automatic standby function, see "Setting the automatic standby function" (page 55).

Deactivating the buttons on the unit (Child Lock)

You can deactivate the buttons on the unit (except I/⏻) to prevent misoperation, such as child mischief.

Hold down ■ on the unit for more than 5 seconds.

"CHILD LOCK" and "ON" appear on the display.

You can only operate the system using the buttons on the remote control.

To turn off the Child Lock function, hold down ■ on the unit for more than 5 seconds until "CHILD LOCK" and "OFF" appear on the display.

Note

Child Lock function will be turned off automatically when you disconnect the AC power cord.

Setting the automatic standby function

This system is equipped with an automatic standby function. With this function, the system enters standby mode automatically in about 15 minutes when there is no operation or audio signal output. By default, the automatic standby function is turned on.

1 Hold down SHIFT, then press OPTIONS.

2 Press ▲/▼ repeatedly to select "AUTO STBY," then press ⊕.

3 Press ▲/▼ repeatedly to select "ON" or "OFF."

Notes

- The message "AUTO STBY" flashes on the display about 2 minutes before entering standby mode.
- The automatic standby function does not work in the tuner function.
- The system may not enter standby mode automatically in the following cases:
 - when an audio signal is detected.
 - during playback of audio files.
 - while the preset Play Timer, Recording Timer or Sleep Timer is in process.

Troubleshooting

Should you encounter a problem with your system, find your problem in the troubleshooting checklist below and take the corrective action.

If the problem persists, consult your nearest Sony dealer.

Note that if the service personnel changes some parts during repair, these parts may be retained.

If "PROTECT XX" (X is a number) appears on the display

Immediately unplug the AC power cord, and check the following items.

- Is anything blocking the ventilation holes of the system?
- Is the USB port short-circuited?

After you have checked these above items and found no problems, reconnect the AC power cord, and turn on the system. If the issue persists, contact your nearest Sony dealer.

General

The system has entered standby mode.

- This is not a malfunction. The system enters standby mode automatically in about 15 minutes when there is no operation or audio signal output (page 55).

The clock or timer setting is canceled.

- The AC power cord is disconnected or a power failure occurred. Set the clock (page 19) and timer (page 53) again.

There is no sound.

- Adjust the volume.
- Check the connection of the optional equipment, if any (page 16).
- Turn on the connected equipment.
- There is no audio output available during Recording Timer.

There is no microphone sound.

- Adjust the microphone volume level.
- Make sure the microphone is connected to the MIC 1 or MIC 2 jack correctly.
- Make sure the microphone is turned on.

There is severe hum or noise.

- Move the system away from sources of noise.
- Connect the system to a different wall outlet.
- Install a noise filter (commercially available) to the AC power cord.
- Turn off surrounding electrical equipment.

The timer does not function.

- Check the timer setting and set the correct time (page 53).
- Cancel the Sleep Timer function (page 53).

The remote control does not function.

- Remove the obstacles between the remote control and the unit.
- Move the remote control closer to the unit.
- Point the remote control at the unit's sensor.
- Replace the batteries (R6/size AA).
- Move the unit away from the fluorescent light.

There is acoustic feedback.

- Reduce the volume.
- Move the microphone away from the system or change the direction of the microphone.

The color irregularity on a TV screen persists.

- Turn off the TV at once, then turn it on after 15 to 30 minutes. If the color irregularity still persists, place the system farther away from the TV.

"CHILD LOCK" appears when you press any button on the unit.

- Set the Child Lock function to off (page 55).

Disc player

The disc tray does not open and "LOCKED" appears on the display.

- Consult your nearest Sony dealer or local authorized Sony service facility.

The disc tray does not close.

- Load the disc correctly.

The disc does not eject.

- You cannot eject the disc during CD-USB Synchronized Transfer or REC1 Transfer. Press ■ to cancel the transfer, then press ▲ on the unit to eject the disc.
- Consult your nearest Sony dealer.

Playback does not start.

- Reload the disc.
- Load the disc that this system can play back (page 6).
- Wipe the disc clean (page 66).
- Remove the disc and wipe away the moisture on the disc, then leave the system turned on for a few hours until the moisture evaporates.
- The region code on the DVD VIDEO does not match the system.

The sound skips.

- Wipe the disc clean (page 66).
- Reload the disc.
- Move the unit to a place with no vibration (e.g., on top of a stable stand).

Playback does not start from the first track.

- Set the play mode to Normal Play (page 26).
- Resume Play has been selected. Press ■ twice. Then, press ► to start playback.

You cannot perform some functions such as Stop, Lock Search, Slow-motion Play, Repeat Play, Shuffle Play, or Program Play.

- Depending on the disc, you may not be able to do some of the operations above. Refer to the operating instructions supplied with the disc.

The DATA CD/DVD (MP3 audio file/ JPEG image file/video file) cannot be played back.

- The data is not stored in the supported format.
- The system can play back to a depth of 8 folders only.
- The disc contains more than 300 folders.
- The JPEG image file is larger than 3,072 (width) × 2,048 (height) pixels in normal mode, or more than 3,300,000 pixels in progressive JPEG mode which is mainly used on the Internet websites.
- JPEG image files and video files with a high width to length ratio cannot be played back.
- The video files are larger than 720 (width) × 576 (height) pixels.
- Make sure you have selected the correct Media Mode before playback.

The folder name, track name, file name and ID3 tag characters do not appear properly.

- The ID3 version is not in Version 1 (1.0/1.1) or Version 2 (2.2/2.3).
- The character codes that can be displayed by this system are as follows:
 - Upper cases (A to Z)
 - Numbers (0 to 9)
 - Symbols (<> * +, [] \ _)Other characters appear as “_”.

The sound loses stereo effect when you play back an AUDIO CD, VIDEO CD, audio file, video file, or DVD VIDEO.

- Unplug all the microphones or hold down SHIFT, then press KARAOKE MODE repeatedly until “” disappears from the display.
- Make sure the system is connected properly.

USB device

Transferring results in an error.

- You are using an unsupported USB device. Check the information on the website about compatible USB devices (page 10).
- The USB device is not formatted correctly. Refer to the operating instructions of the USB device on how to format.
- Turn off the system and remove the USB device. If the USB device has a power switch, turn the USB device off and on again after removing it from the system. Then, perform the transfer again.
- If the transfer and erase operations are repeated multiple times, the file structure within the USB device becomes fragmented. Refer to the operating instructions supplied with the USB device on how to deal with this problem.
- The USB device was disconnected or the power was turned off during transfer. Delete the partially-transferred file, and perform the transfer again. If this does not fix the problem, the USB device may be broken. Refer to the operating instructions of the USB device on how to deal with this problem.

Audio files or folders on the USB device cannot be erased.

- Check if the USB device is write-protected.
- The USB device was disconnected or the power was turned off during the erase operation. Delete the partially-erased file. If this does not fix the problem, the USB device may be broken. Refer to the operating instructions of the USB device on how to deal with this problem.

There is no sound.

- The USB device is not connected correctly. Turn off the system and reconnect the USB device, then turn on the system.

There is noise, skipping, or distorted sound.

- You are using an unsupported USB device. Check the information on the website about compatible USB devices (page 10).
- Turn off the system and reconnect the USB device, then turn on the system.
- The music data itself contains noise, or the sound is distorted. Noise may have entered during the transfer process. Delete the file, and try transfer again.
- The bit rate used in encoding an audio file was low. Send an audio file with higher bit rate to the USB device.

“READING” is displayed for an extended time, or it takes a long time before playback starts.

- The reading process can take a long time in the following cases.
 - There are many folders or files on the USB device (page 9).
 - The file structure is extremely complex.
 - The memory capacity is excessive.
 - The internal memory is fragmented.

“OVER CURRENT” appears on the display.

- A problem has been detected with the level of electrical current from the Ψ A port or Ψ B port. Turn off the system and remove the USB device from the port. Make sure there is no problem with the USB device. If this display pattern persists, contact your nearest Sony dealer.

Erroneous display.

- The data stored in the USB device may have been corrupted, perform the transfer again.
- The character codes that can be displayed by this system are as follows:
 - Upper cases (A to Z)
 - Numbers (0 to 9)
 - Symbols (< > * +, [] \ _)Other characters appear as “ _ ”.

The USB device is not recognized.

- Turn off the system and reconnect the USB device, then turn on the system.
- Check the information on the website about compatible USB devices (page 10).
- The USB device is not working properly. Refer to the operating instructions of the USB device on how to deal with this problem.

Playback does not start.

- Turn off the system and reconnect the USB device, then turn on the system.
- Check the information on the website about compatible USB devices (page 10).

Playback does not start from the first file.

- Set the play mode to Normal Play (page 26).

Files cannot be played back.

- The JPEG image file is larger than 3,072 (width) × 2,048 (height) pixels in normal mode, or more than 3,300,000 pixels in Progressive JPEG mode which is mainly used on the Internet websites.
- JPEG image files with a high width to length ratio cannot be played back.
- Make sure you have selected the correct Media Mode before playback.
- USB devices formatted with file systems other than FAT16 or FAT32 are unsupported.*
- A WMA audio file that is created in the WMA DRM, WMA Lossless, or WMA PRO format cannot be played back.

- An AAC audio file that is created in the AAC DRM or AAC Lossless format cannot be played back.
- AAC audio files encoded at 96 kHz cannot be played back.
- If multiple partitions exist on a USB device that is being used, files may not be played back.
- The system can play back to a depth of 8 folders only.
- The number of folders has exceeded 300.
- The number of files has exceeded 2,000.
- Files that are encrypted or protected by passwords, etc. cannot be played back.
- Files with DRM (Digital Rights Management) copyright protection cannot be played back by this system.
- The MP3 PRO audio file can be played back as MP3 audio file.

* This system supports FAT16 and FAT32, but some USB devices may not support all of these FAT. For details, refer to the operating instructions of each USB device or contact the manufacturer.

Picture

There is no picture.

- Check that the system is connected securely.
- If the video cord is damaged, replace it with a new one.
- Make sure you connect the system to the video input jack of your TV (page 17).
- Make sure you turn on the TV and operate the TV correctly.
- Make sure you select the video input on the TV so that you can view the pictures from the system.
- (Except for Latin American model) Make sure you set the color system correctly, according to your TV's color system.

Picture noise appears.

- Wipe the disc clean (page 66).
- If video signal from your system has to go through your VCR to your TV, the copy-protection applied to some DVD VIDEO programs could affect the picture quality.
- (Except for Latin American model) When you play back a VIDEO CD recorded in a different color system from the one you set to the system, the picture image may be distorted (pages 18, 32).
- (Except for Latin American model) Set the color system to match your TV (pages 18, 32).

The aspect ratio of the TV screen cannot be changed.

- The aspect ratio is fixed on your DVD VIDEO and video file.
- Depending on the TV, you may not change the aspect ratio.

The language for the sound track cannot be changed.

- Multilingual tracks are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the language for the sound track.

The subtitles language cannot be changed.

- Multilingual subtitles are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the subtitles.

The subtitles cannot be turned off.

- The DVD VIDEO prohibits turning off subtitles.

The camera angles cannot be changed.

- Multi-angles are not recorded on the DVD VIDEO being played back.
- The DVD VIDEO prohibits changing the angles.

Tuner

There is severe hum or noise, or stations cannot be received. ("TUNED" or "STEREO" flashes on the display.)

- Connect the antenna properly.
- Change antenna location and its orientation to obtain good reception.
- Consult your nearest Sony dealer if the supplied AM antenna has come off from the plastic stand.
- Turn off nearby electrical equipment.

BLUETOOTH device

Pairing cannot be performed.

- Move the BLUETOOTH device closer to the system.
- Pairing may not be possible if other BLUETOOTH devices are present around the system. In this case, turn off the other BLUETOOTH devices.
- Make sure to enter the correct passkey when selecting the model number (this system) on the BLUETOOTH device.

Connection is not possible.

- The BLUETOOTH device you attempted to connect does not support the A2DP profile, and cannot be connected with the system.
- Enable the BLUETOOTH function of the BLUETOOTH device.
- Establish a connection from the BLUETOOTH device.
- The pairing registration information has been erased. Perform the pairing operation again.
- Erase the pairing registration information of the BLUETOOTH device (page 45) and perform the pairing operation again (page 42).

The sound skips or fluctuates, or the connection is lost.

- The system and the BLUETOOTH device are too far apart.
- If there are obstacles between the system and your BLUETOOTH device, remove or avoid the obstacles.
- If there is equipment that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move them away.

The sound of your BLUETOOTH device cannot be heard on this system.

- Increase the volume on your BLUETOOTH device first, then adjust the volume using VOL +/-.

There is severe hum, noise or distorted sound.

- If there are obstacles between the system and your BLUETOOTH device, remove or avoid the obstacles.
- If there is equipment that generates electromagnetic radiation, such as a wireless LAN, other BLUETOOTH device, or a microwave oven nearby, move them away.
- Turn down the volume of the connected BLUETOOTH device.

Party Chain

Party Chain function cannot be activated.

- Check the connections (page 50).
- Make sure the audio cords are connected correctly.
- Adjust the volume.

There is no sound when you select the audio in function.

- Adjust the volume on the connected equipment.
- Try turning off the system, then turning it back on again.

"PARTY CHAIN" is flashing on the display.

- The audio in function is selected in the Party Chain function. Press FUNCTION repeatedly to select other function.
- Try turning off the system, then turning it back on again.

To reset the system

If the system still does not operate properly, reset the system to factory default settings.

Use the buttons on the unit to perform this operation.

- 1 Unplug the AC power cord, and then plug it back in.**
- 2 Press I/⏻ to turn on the system.**
- 3 Hold down ■ and BASS BAZUCA at the same time for about 3 seconds.**
"RESET" appears on the display.
All user-configured settings, such as preset radio stations, timer, and the clock are reset to factory default setting.

Returning the "SETUP" settings to the default

You can return the "SETUP" settings (except for "PARENTAL CONTROL" settings) to the default settings.

- 1 Hold down SHIFT, then press SETUP.**
- 2 Press ⬆/⬇ repeatedly to select [SYSTEM SETUP], then press ⊕.**
- 3 Press ⬆/⬇ repeatedly to select [RESET], then press ⊕.**
- 4 Press ⬅/➡ repeatedly to select [YES], then press ⊕.**
It takes a few seconds to complete.
Do not press I/⏻ while resetting the system.

Self-diagnosis Function

When letters/numbers appear on the display

When the self-diagnosis function is activated to prevent the system from malfunctioning, a service number appears on the TV screen. The service number consists of an alphabet and numerals (e.g. C 13 50). See the following table for the cause and corrective action.

| First 3 characters of the service number | Cause and corrective action |
|--|--|
| C 13 | This disc is dirty. <ul style="list-style-type: none">• Clean the disc with a soft cloth (page 66). |
| C 31 | The disc is not inserted correctly. <ul style="list-style-type: none">• Restart the system, then re-insert the disc correctly. |
| E XX (XX is a number) | To prevent a malfunction, the system has performed the self-diagnosis function. <ul style="list-style-type: none">• Contact your nearest Sony dealer or local authorized Sony service facility and give the 5-character service number. Example: E 61 10 |

Messages

One of the following messages may appear or flash on the display during operation.

CANNOT PLAY

- A disc that cannot be played back was inserted.
- A DVD VIDEO with unsupported region code was inserted.

DATA ERROR

- The file is created in unsupported format.
- The file extensions does not match the file format.

DEVICE ERROR

The USB device could not be recognized or an unknown device is connected.

DEVICE FULL

The memory of the USB device is full.

ERASE ERROR

Erase of audio files or folders on the USB device failed.

FATAL ERROR

The USB device was removed during transfer or erase operation, and may have been damaged.

FOLDER FULL

You cannot transfer onto the USB device because the number of folders has reached its maximum.

NO DEVICE

No USB device is connected.

NO DISC

There is no disc in the player.

NO MEMORY

The memory selected for playback or transfer has no memory media inserted in the USB device.

NO MUSIC

No MP3/WMA/AAC files exist in the playback source.

NO PHOTO

No JPEG files exist in the playback source.

NO STEP

All of the programmed steps have been erased.

NO VIDEO

No MPEG4/Xvid files exist in the playback source.

NOT IN USE

You tried to perform a specific operation under conditions where that operation is prohibited.

NOT SUPPORTED

An unsupported USB device is connected, or the USB device is connected through a USB hub.

PROTECT

The USB device is write-protected.

PUSH STOP

You tried to perform an operation that can be performed only when the playback is stopped.

READING

The system is reading information of the disc or USB device. Some operations are not available.

REC ERROR

The transfer did not start, stopped partway, or otherwise could not be performed.

STEP FULL

You tried to program more than 25 steps.

TIME NG

The on time and off time of Play Timer or Recording Timer is the same.

TRACK FULL

You cannot transfer onto the USB device because the number of files has reached its maximum.

Precautions

When carrying this system

To avoid damaging the disc mechanism, perform the following procedure before carrying this system.

1 Press I/⏻ to turn on the system.

2 Press DVD/CD.

3 Remove the disc.

Press ▲ to open and close the disc tray.

Wait until "NO DISC" appears on the display.

4 Unplug the AC power cord.

Notes on discs

- Before playing, wipe the disc with a cleaning cloth from the center outward to the edge.
- Do not clean discs with solvents, such as benzene, thinner, or commercially available cleaners or anti-static spray intended for vinyl LPs.
- Do not expose discs to direct sunlight or heat sources such as hot air ducts, nor leave them in a car parked in direct sunlight.

On safety

- Completely disconnect the AC power cord (mains lead) from the wall outlet (mains) if it is not going to be used for an extended period of time. When unplugging the unit, always grip the plug. Never pull the cord itself.
- Should any solid object or liquid get into the system, unplug the system, and have it checked by qualified personnel before operating it again.
- AC power cord must be changed only at the qualified service shop.

On placement

- Do not place the system in an inclined position or in locations that are extremely hot, cold, dusty, dirty, or humid or lacking adequate ventilation, or subject to vibration, direct sunlight or a bright light.
- Be careful when placing the system on surfaces that have been specially treated (for example, wax, oil, polish) as staining or discoloration of the surface may result.
- If the system is brought directly from a cold to a warm location or is placed in a very damp room, moisture may condense on the lens inside the unit, and cause the system to malfunction. In this situation, remove the disc, and leave the system turned on for about an hour until the moisture evaporates.

On heat buildup

- Heat buildup on the unit during operation is normal and is not a cause for alarm.
- Do not touch the cabinet if it has been used continuously at a high volume because the cabinet may have become hot.
- Do not obstruct the ventilation holes.

On the speaker system

The built-in speaker system is not magnetically shielded, and the picture on nearby TV sets may become magnetically distorted. In this situation, turn off the TV, wait 15 to 30 minutes, and turn it back on. If there is no improvement, move the system far away from the TV.

IMPORTANT NOTICE

Caution: If you leave a still video image or on-screen display image displayed on your TV for an extended period of time via this system, you risk permanent damage to your TV screen. Projection TVs are especially susceptible to this.

Cleaning the cabinet

Clean this system with a soft cloth slightly moistened with a mild detergent solution. Do not use any type of abrasive pad, scouring powder, or solvent, such as thinner, benzene, or alcohol.

On BLUETOOTH communication

- BLUETOOTH devices should be used within approximately 10 meters (unobstructed distance) of each other. The effective communication range may become shorter under the following conditions.
 - When a person, metal object, wall or other obstruction is between the devices with a BLUETOOTH connection
 - Locations where a wireless LAN is installed
 - Around microwave ovens that are in use
 - Locations where other electromagnetic waves occur
- BLUETOOTH devices and wireless LAN (IEEE 802.11b/g) use the same frequency band (2.4 GHz). When using your BLUETOOTH device near a device with wireless LAN capability, electromagnetic interference may occur. This could result in lower data transfer rates, noise, or inability to connect. If this happens, try the following remedies:
 - Try connecting this system and BLUETOOTH device when you are at least 10 meters away from the wireless LAN equipment.
 - Turn off the power of the wireless LAN equipment when using your BLUETOOTH device within 10 meters.
- The radio waves broadcast by this system may interfere with the operation of some medical devices. Since this interference may result in malfunction, always turn off the power on this system and BLUETOOTH device in the following locations:
 - In hospitals, on trains, in airplanes, at gas stations, and any place where flammable gases may be present
 - Near automatic doors or fire alarms
- This system supports security functions that comply with the BLUETOOTH specification as a means of ensuring security during communication using BLUETOOTH technology. However, this security may be insufficient depending on the setting contents and other factors, so always be careful when performing communication using BLUETOOTH technology.
- Sony cannot be held liable in any way for damages or other loss resulting from information leaks during communication using BLUETOOTH technology.
- BLUETOOTH communication is not necessarily guaranteed with all BLUETOOTH devices that have the same profile as this system.

- BLUETOOTH devices connected with this system must comply with the BLUETOOTH specification prescribed by the Bluetooth SIG, Inc., and must be certified to comply. However, even when a device complies with the BLUETOOTH specification, there may be cases where the characteristics or specifications of the BLUETOOTH device make it impossible to connect, or may result in different control methods, display or operation.
- Noise may occur or the audio may cut off depending on the BLUETOOTH device connected with this system, the communications environment, or surrounding conditions.

Specifications

Amplifier section

Power output (rated):

Left/Right Channel: 320 W +
320 W (at 5 ohms, 1 kHz, 1% THD)

Power output (reference):

Left/Right Channel: 480 W +
480 W (per channel at 5 ohms,
1 kHz)

Subwoofer: 480 W (at 5 ohms,
100 Hz)

Speaker section

Speaker system: Tweeter + Mid range
speaker + woofer

Tweeter L/R: 40 mm cone type

Mid L/R: 100 mm cone type

Woofer: 250 mm cone type

Inputs

AUDIO IN/PARTY CHAIN IN L/R:

Voltage 2 V, impedance
47 kilohms

MIC 1, MIC 2:

Sensitivity 1 mV, impedance
10 kilohms

⚡ A (USB), ⚡ B (USB) port:

Type A, maximum current:
500 mA

Outputs

AUDIO OUT/PARTY CHAIN OUT L/R:

Voltage 2 V, impedance
47 kilohms

VIDEO OUT:

Max. output level 1 Vp-p,
unbalanced, Sync. negative load
impedance 75 ohms

iPod/iPhone section

Made for

- iPhone 5s
- iPhone 5c
- iPhone 5
- iPhone 4s
- iPhone 4
- iPhone 3GS
- iPod touch (5th generation)
- iPod touch (4th generation)

Disc player section

System:

Compact disc and digital audio and video system

Laser Diode Properties

Emission Duration: Continuous

Laser Output*: Less than 44.6 μW

* This output is the value measurement at a distance of 200 mm from the objective lens surface on the Optical Pick-up Block with 7 mm aperture.

Frequency response:

20 Hz – 20 kHz

Signal-to-noise ratio:

More than 90 dB

Dynamic range:

More than 88 dB

Video color system format:

NTSC and PAL

Tuner section

FM stereo, FM/AM superheterodyne tuner

Antenna:

FM lead antenna

AM loop antenna

FM tuner section

Tuning range:

87.5 MHz - 108.0 MHz (50 kHz step)

AM tuner section

Tuning range:

Latin American model:

530 kHz – 1,710 kHz (10 kHz step)

531 kHz – 1,710 kHz (9 kHz step)

Other models:

531 kHz – 1,602 kHz (9 kHz step)

530 kHz – 1,610 kHz (10 kHz step)

BLUETOOTH section

Communication system:

BLUETOOTH Standard version 3.1

Output:

BLUETOOTH Standard Power
Class 2

Maximum communication range:

Line of sight approx. 10 m¹⁾

Frequency band:

2.4 GHz band (2.4000 GHz –
2.4835 GHz)

Modulation method:

FHSS (Freq Hopping Spread
Spectrum)

Compatible BLUETOOTH profiles²⁾:

A2DP (Advanced Audio
Distribution Profile)
AVRCP 1.3 (Audio Video Remote
Control Profile)
SPP (Serial Port Profile)

Supported codecs:

SBC (Sub Band Codec)
AAC (Advanced Audio Coding)

¹⁾ The actual range will vary depending on factors such as obstacles between devices, magnetic fields around a microwave oven, static electricity, reception sensitivity, antenna's performance, operating system, software application, etc.

²⁾ BLUETOOTH standard profiles indicate the purpose of BLUETOOTH communication between devices.

Supported audio formats

Supported bit rate:

MPEG1 Layer-3:
32 kbps – 320 kbps, VBR
WMA (USB devices only):
48 kbps – 192 kbps, VBR
AAC (USB devices only):
48 kbps – 320 kbps, VBR

Sampling frequencies:

MPEG1 Layer-3:
32 kHz/44.1 kHz/48 kHz
WMA (USB devices only):
44.1 kHz
AAC (USB devices only):
44.1 kHz

Supported video formats

Xvid:

Video codec: Xvid video
Bit rate: 4.854 Mbps (MAX)
Resolution/Frame rate:
720 × 480 (30 fps)
720 × 576 (25 fps)
Audio codec: MP3

MPEG4:

File format: MP4 File Format
Video codec: MPEG4 Simple
Profile (AVC is not compatible.)
Bit rate: 4 Mbps
Resolution/Frame rate:
720 × 480 (30 fps)
720 × 576 (25 fps)
Audio codec: AAC-LC (HE-AAC is
not compatible.)
DRM: Not compatible

General

Power requirements:

Indian and Thai models:

AC 220 V – 240 V, 50/60 Hz

Other models:

AC 120 V – 240 V, 50/60 Hz

Power consumption:

Indian model:

195 W (0.5 W at the Power Saving mode)

Other models:

240 W (0.5 W at the Power Saving mode)

Dimensions (W/H/D) (Approx.):

339 mm × 908 mm × 325 mm

Mass (Approx.):

18 kg

Supplied accessories:

Remote control (1)

R6 (Size AA) batteries (2)

AC power cord (1)

FM lead/AM loop antenna (1)

Video cord (1)

Design and specifications are subject to change without notice.

Language code list

The language spellings conform to the ISO 639:1988 (E/F) standard.

| Code | Language | Code | Language | Code | Language | Code | Language |
|-------------|-----------------|-------------|------------------|-------------|-----------------|-------------|-----------------|
| 1027 | Afar | 1186 | Scots Gaelic | 1350 | Malayalam | 1513 | Siswati |
| 1028 | Abkhazian | 1194 | Galician | 1352 | Mongolian | 1514 | Sesotho |
| 1032 | Afrikaans | 1196 | Guarani | 1353 | Moldavian | 1515 | Sundanese |
| 1039 | Amharic | 1203 | Gujarati | 1356 | Marathi | 1516 | Swedish |
| 1044 | Arabic | 1209 | Hausa | 1357 | Malay | 1517 | Swahili |
| 1045 | Assamese | 1217 | Hindi | 1358 | Maltese | 1521 | Tamil |
| 1051 | Aymara | 1226 | Croatian | 1363 | Burmese | 1525 | Telugu |
| 1052 | Azerbaijani | 1229 | Hungarian | 1365 | Nauru | 1527 | Tajik |
| 1053 | Bashkir | 1233 | Armenian | 1369 | Nepali | 1528 | Thai |
| 1057 | Byelorussian | 1235 | Interlingua | 1376 | Dutch | 1529 | Tigrinya |
| 1059 | Bulgarian | 1239 | Interlingue | 1379 | Norwegian | 1531 | Turkmen |
| 1060 | Bihari | 1245 | Inupiak | 1393 | Occitan | 1532 | Tagalog |
| 1061 | Bislama | 1248 | Indonesian | 1403 | (Afan) Oromo | 1534 | Setswana |
| 1066 | Bengali; Bangla | 1253 | Icelandic | 1408 | Oriya | 1535 | Tonga |
| 1067 | Tibetan | 1254 | Italian | 1417 | Punjabi | 1538 | Turkish |
| 1070 | Breton | 1257 | Hebrew | 1428 | Polish | 1539 | Tsonga |
| 1079 | Catalan | 1261 | Japanese | 1435 | Pashto; Pushto | 1540 | Tatar |
| 1093 | Corsican | 1269 | Yiddish | 1436 | Portuguese | 1543 | Twi |
| 1097 | Czech | 1283 | Javanese | 1463 | Quechua | 1557 | Ukrainian |
| 1103 | Welsh | 1287 | Georgian | 1481 | Rhaeto-Romance | 1564 | Urdu |
| 1105 | Danish | 1297 | Kazakh | 1482 | Kirundi | 1572 | Uzbek |
| 1109 | German | 1298 | Greenlandic | 1483 | Romanian | 1581 | Vietnamese |
| 1130 | Bhutani | 1299 | Cambodian | 1489 | Russian | 1587 | Volapük |
| 1142 | Greek | 1300 | Kannada | 1491 | Kinyarwanda | 1613 | Wolof |
| 1144 | English | 1301 | Korean | 1495 | Sanskrit | 1632 | Xhosa |
| 1145 | Esperanto | 1305 | Kashmiri | 1498 | Sindhi | 1665 | Yoruba |
| 1149 | Spanish | 1307 | Kurdish | 1501 | Sangho | 1684 | Chinese |
| 1150 | Estonian | 1311 | Kirghiz | 1502 | Serbo-Croatian | 1697 | Zulu |
| 1151 | Basque | 1313 | Latin | 1503 | Singhalese | 1703 | Not specified |
| 1157 | Persian | 1326 | Lingala | 1505 | Slovak | | |
| 1165 | Finnish | 1327 | Laothian | 1506 | Slovenian | | |
| 1166 | Fiji | 1332 | Lithuanian | 1507 | Samoan | | |
| 1171 | Faroese | 1334 | Latvian; Lettish | 1508 | Shona | | |
| 1174 | French | 1345 | Malagasy | 1509 | Somali | | |
| 1181 | Frisian | 1347 | Maori | 1511 | Albanian | | |
| 1183 | Irish | 1349 | Macedonian | 1512 | Serbian | | |

Parental Control area code list

| Code | Area | Code | Area | Code | Area | Code | Area |
|-------------|-------------|-------------|-------------|-------------|-------------|-------------|----------------|
| 2044 | Argentina | 2165 | Finland | 2362 | Mexico | 2149 | Spain |
| 2047 | Australia | 2174 | France | 2376 | Netherlands | 2499 | Sweden |
| 2046 | Austria | 2109 | Germany | 2390 | New Zealand | 2086 | Switzerland |
| 2057 | Belgium | 2248 | India | 2379 | Norway | 2528 | Thailand |
| 2070 | Brazil | 2238 | Indonesia | 2427 | Pakistan | 2184 | United Kingdom |
| 2079 | Canada | 2254 | Italy | 2424 | Philippines | | |
| 2090 | Chile | 2276 | Japan | 2436 | Portugal | | |
| 2092 | China | 2304 | Korea | 2489 | Russia | | |
| 2115 | Denmark | 2363 | Malaysia | 2501 | Singapore | | |

Glossary

Dolby Digital

This sound format for movie theaters is more advanced than Dolby Surround Pro Logic. In this format, the surround speakers output stereo sound with an expanded frequency range and a subwoofer channel for deep bass is independently provided. This format is also called "5.1" with the subwoofer channel designed as 0.1 channel (since it functions only when a deep bass effect is needed). All six channels in this format are recorded separately to realize superior channel separation. Furthermore, since all the signals are processed digitally, less signal degradation occurs.

DVD VIDEO

A disc that contains up to 8 hours of moving pictures even though its diameter is the same as an AUDIO CD.

The data capacity of a single-layer and single-sided DVD VIDEO, at 4.7 GB (Giga Byte), is 7 times that of an AUDIO CD. Furthermore, the data capacity of a dual-layer and single-sided DVD VIDEO is 8.5 GB, a single-layer and double-sided DVD VIDEO 9.4 GB, and a dual-layer and double-sided DVD VIDEO 17 GB. The picture data uses the MPEG 2 format, one of the worldwide standards for digital compression technology. The picture data is compressed to about 1/40 of its original size. The DVD VIDEO also uses variable rate coding technology that changes the data to be allocated according to the status of the picture.

The audio data is recorded in Dolby Digital as well as in PCM, allowing you to enjoy more realistic audio presence.

Furthermore, various advanced functions such as the multi-angle, multilingual, and Parental Control functions are provided with the DVD VIDEO.

DVD-RW

A DVD-RW is a recordable and rewritable disc that is the same size as a DVD VIDEO. The DVD-RW has two different modes: VR mode and Video mode. DVD-RWs created in Video mode have the same format as a DVD VIDEO, while discs created in VR (Video Recording) mode allow the contents to be programmed or edited.

DVD+RW

A DVD+RW (plus RW) is a recordable and rewritable disc. DVD+RWs use a recording format that is comparable to the DVD VIDEO format.

Film based software, Video based software

DVD VIDEOS can be classified as Film based or Video based software. Film based DVD VIDEOS contain the same images (24 frames per second) that are shown at movie theaters. Video based DVD VIDEOS, such as television dramas or sitcoms, displays images at 30 frames (or 60 fields) per second.

Multi-angle function

Various angles, or viewpoints of the video camera, for a scene are recorded on some DVD VIDEOS.

Multilingual function

Several languages for the sound or subtitles in a picture are recorded on some DVD VIDEOS.

Parental Control

A function of the DVD VIDEO to limit playback of the disc by the age of the users according to the limitation level in each country. The limitation varies from disc to disc; when it is activated, playback is completely prohibited, violent scenes are skipped or replaced with other scenes and so on.

Playback Control (PBC)

Signals encoded on VIDEO CDs (VIDEO CDs Version 2.0 and Super VCDs) to control playback. By using menu screens recorded on VIDEO CDs with PBC functions, you can enjoy playing simple interactive programs, programs with search functions, and so on.

VIDEO CD

A compact disc that contains moving pictures. The picture data uses the MPEG 1 format, one of the worldwide standards for digital compression technology. The picture data is compressed to about 1/140 of its original size. Consequently, a 12 cm VIDEO CD can contain up to 74 minutes of moving pictures. VIDEO CDs also contain compact audio data.

Sound outside the range of human hearing are compressed while the sounds we can hear are not compressed. VIDEO CDs can hold 6 times the audio information of conventional AUDIO CDs.

There are 2 versions of VIDEO CDs.

- Version 1.1: You can play back only moving pictures and sounds.
- Version 2.0: You can play back high-resolution still pictures and enjoy PBC functions.

This system conforms to both versions.

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MP3



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